ALLIED

Electronics for Everyone 1970

ALLIED
Solid State Stereophonic Receiver
TUNING
SELECTOR
FM AUTO
FM MONO
AM
PHONO
TAPE HD
SPEAKERS
REMOTE
MAIN
MAIN + REMOTE
SPEAKER OFF
PHONES
POWER OFF
BASS
FRONT LT
REAR RT
TREBLE
FRONT LT
REAR RT
BALANCE
VOLUME
LOUDNESS
LOW FILTER
HIGH FILTER
MUTING
AFC
PHONO2
OFF
OFF
OFF
OFF
OFF
PHONO1
MODE
TAPE MON
STEREO LEFT
STEREO LEFT
RIGHT

OUR 49TH YEAR · CATALOG 290 · INDEX PAGE 443 · SATISFACTION GUARANTEED OR YOUR MONEY BACK—SEE PAGE 442

ALLIED RADIO · 100 N. WESTERN AVE. · CHICAGO, ILL. 60680 · (312) 421-6800 only 1¢ more

Choice of Elliptical Cartridge

Empire
888E
Reg. $39.95

Pickering
V15/ATE-3
Reg. $39.95

Shure
M93E
Reg. $39.95

only $5 more

Choice of Deluxe Elliptical Cartridge

Empire
888TE
Reg. $49.95

Pickering
XV15/AME
Reg. $49.95

Shure
M91E
Reg. $49.95

B

A

Garrard's best! SL95B plus Empire 999VE super-elliptical Cartridge

only $25 more

Save $49.95. Connoisseur' choice for superb stereo fro automatic turntables . . . Empi 999VE plus Garrard SL95.

13 A 0952 DU. 13 lbs. . . [illegible]54.5

13 A 3976. 999VE Alone . . 74.9

Garrard precision Synchro-Lab Automatic Turntables with money-saving elliptical stereo cartridge offers

A SL95B . . Garrard's finest model

SL95B Alone	With Deluxe Elliptical	With Elliptical Cartridge
129^{50}	134^{50}	129^{51}

Save $39.94. Acclaimed by experts—finest Garrard ever! Has perfect-speed Synchro-Lab motor, adjustable counterweight, combined manual and cuing controls, stylus force dial, ultra-low mass pickup arm, gimballed needle pivots. Automatic or manual operation at 33⅓, 45 and 78 rpm. Less base, 45-rpm automatic spindle. Choose Empire 888E, Pickering V15/ATE-3 or Shure M93E elliptical stereo cartridge—*specify.*

13 A 0950 CDU. Shpg. wt., 13 lbs. 129.51

SL95B Automatic Turntable with Deluxe Elliptical Stereo Cartridge for $5 more. *Save $44.95.* Empire 888TE, Pickering XV15/AME or Shure M91E—*specify.*

13 A 0951 CDU. Shpg. wt., 13 lbs. 134.50

13 A 3114 U. SL95B Alone. Shpg. wt., 13 lbs. 129.50

B SL72B . . One of Garrard's newest

SL72B Alone	With Deluxe Elliptical	With Elliptica Cartridge
89^{50}	94^{50}	89^{51}

Save $39.94. Precision three-speed automatic turnt has styling and many features of the SL95B, but at a m modest price. Famous Synchro-Lab motor for perfect sp low-mass pickup arm, gimballed needle pivots. Adjust counterweight, anti-skating control, calibrated stylus p sure gauge. Slide-in cartridge. Less base, 45-rpm spi Empire 888E, Pickering V15/ATE-3 or Shure M93E e tical stereo cartridge—*specify.*

13 A 0955 CDU. Shpg. wt., 13 lbs. 8

SL72B Automatic Turntable with Deluxe Elliptical Stereo tridge for $5 more. *Save $44.95.* Empire 888TE, Picke XV15/AME or Shure M91E—*specify.*

13 A 0956 CDU. Shpg. wt., 13 lbs. 9

13 A 3118 U. SL72B Alone. Shpg. wt., 13 lbs. 8

SEE PAGES 56-59 FOR DETAILS ON THE COMPLETE LINE OF GARRARD TURNTABLES AND ACCESSORIES

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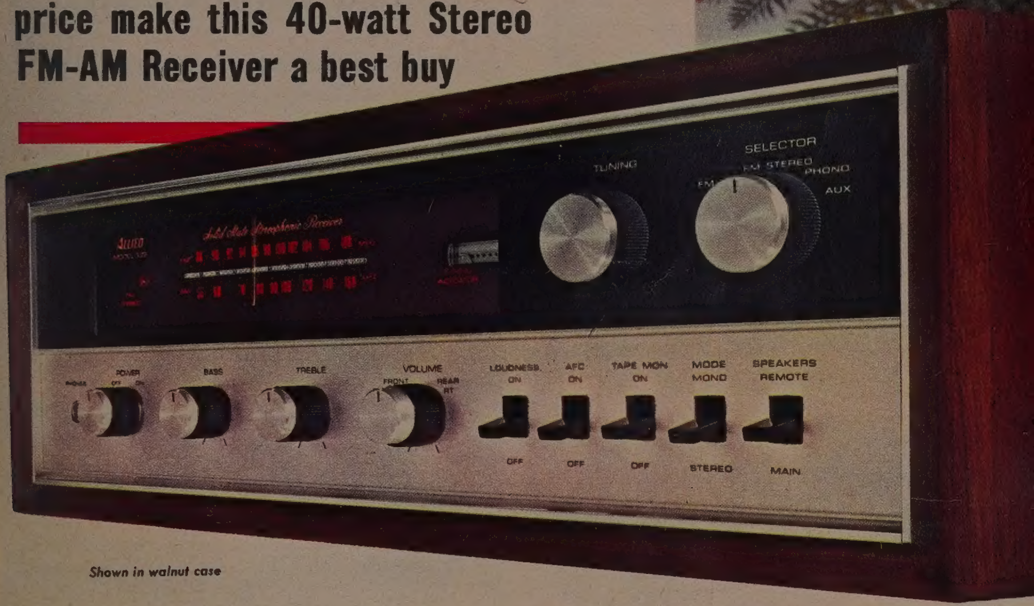
Integrated circuits, FET front-end, plus luxury styling and low price make this 40-watt Stereo FM-AM Receiver a best buy



Shown in walnut case

Allied® all-silicon solid-state Stereo FM-AM Receiver

149.95 Metal case

Model 339. Latest circuit and Allied's low price make this a spectacular value in a solid-state stereo receiver. All-silicon solid-state circuit has Field-Effect-Transistor front-end for exceptional stability and sensitivity. Integrated circuit in 3rd FM IF stage for extra selectivity. Transformerless output delivers plenty of power with pure tonal quality for full-fidelity stereo realism. A full array of controls and inputs lets you master almost every program source.

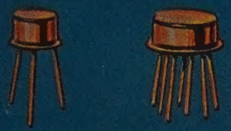
Features include: lighted slide-rule dial with smooth flywheel tuning; automatic stereo-mono switching; stereo indicator light; tuning meter. AFC prevents FM drift. Loudness control provides full-range response even at low volume levels. Stereo headphone jack. Tape recording inputs, outputs and monitor. Shortproof speaker connectors. Has transistor output protection. Two AC convenience sockets on rear, one switched. Built-in ferrite AM, FM dipole antennas. With metal case. Takes optional walnut case below. 5x16 x12½". For 117 VAC. From Japan.

14 A 5039 U. Shpg. wt., 26 lbs. 149.95

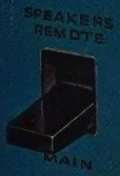
14 A 5003 X. Oiled Walnut Wood Case. Shpg. wt., 6 lbs. 19.95

SPECIFICATIONS

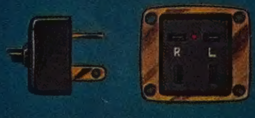
AMPLIFIER CIRCUIT. *Power Output at 4 Ohms:* 40 watts ±1 dB; 32 watts IHF; 11 watts per channel rms. *Response:* 20-40,000 Hz, ±3 dB. *Harmonic Distortion:* 1% at rated power. *IM Distortion:* 0.22%. *Hum and Noise:* Mag. Phono, −65 dB; Aux., −65 dB. *Outputs:* 4-16 ohms, stereo headphones, recorder. *Inputs:* tape, magnetic phono, auxiliary, tape monitor. **TUNER CIRCUIT. FM:** *IHF Sensitivity:* 2.5 μV. *Selectivity:* Exceeds 20 dB. *Separation:* Exceeds 25 dB. *Capture Ratio:* 7.0 dB. *Signal-to-Noise:* Exceeds 56 dB. **AM:** *Sensitivity:* 8 μV. **CONTROLS:** Selector: (AM, FM Mono, FM Stereo, Phono, Aux.), Ganged Bass and Treble, Dual-Concentric Volume, Mono-Stereo, Main/Remote Speaker, Power, Loudness, Tape Monitor.



Field-Effect-Transistor front-end pulls in weak stations, prevents crosstalk and overloading



Convenient Main/ Remote speaker switch lets you select either one of two sets of stereo speakers



Polarized plug-in speaker connectors prevent shorts, aid in speaker phasing

FM-AM-Phono Systems featuring the Allied 339 40-watt Stereo Receiver

Shown in wood case

Save $155.85 **349.95** Metal Case

Our finest 40-watt System . . powerful Argos 12″ three-way speaker systems

Allied 339 40-watt Stereo FM-AM Receiver	$149.95
Garrard SL75B 3-speed Automatic Turntable	109.50
B-2 Base for Turntable	6.50
Empire 888VE Stereo Elliptical Cartridge	59.95
Two Argos XL-500 12″ 3-way Speaker Systems	179.90
SEPARATELY	$505.80
System Price	349.95
SYSTEM SAVINGS	$155.85

Our best 40-watt system features the Allied 339 40-watt solid-state Stereo FM-AM Receiver with metal case; takes optional walnut wood case listed below. Superb Garrard SL75B 3-speed Automatic Turntable features precision Synchro-Lab motor for perfect speed accuracy, cuing, antiskate and stylus force adjustments. With Base. Empire 888VE Stereo Cartridge has .0004x .0009″ elliptical diamond stylus. Two Argos XL-500 three-way Speaker Systems have 12″ Jensen woofer, 8″ closed-back midrange radiator and horn tweeter. Walnut veneer finish. Complete with all audio connecting cables and hi-fi booklet.

14 A 0217 D5Z. Shpg. wt., 108 lbs. 349.95
14 A 5003 X. Walnut Wood Case. Wt., 6 lbs. 19.95

Ⓐ Deluxe System with 12″ 3-way speakers

Allied 339 40-watt Stereo FM-AM Receiver	$149.95
Garrard SL65B 4-speed Automatic Turntable	79.50
B-1 Base for Turntable	5.50
Shure M91E Stereo Elliptical Cartridge	49.95
Two Allied 3030B 12″ 3-way Speaker Systems	129.90
SEPARATELY	$414.80
System Price	299.95
SYSTEM SAVINGS	$114.85

Beautifully matched component system features the Allied 339 40-watt solid-state Stereo FM-AM Receiver with metal case; takes optional walnut wood case at left. Garrard SL65B 4-speed Automatic Turntable has Synchro-Lab motor, cuing, stylus pressure and antiskate adjustments. With Base. Shure M91E Stereo Cartridge has .0002x.0007″ elliptical diamond stylus. Allied 3030B three-way Speaker Systems feature powerful 12″ high-compliance woofer, 6″ midrange radiator and wide-dispersion 3½″ cone tweeter. Walnut-veneer finish with matching cane grille cloth. With all cables and hi-fi booklet.

14 A 0216 D5Z. Shpg. wt., 100 lbs. 299.95

Ⓑ System with 10″ 3-way speakers

Allied 339 40-watt Stereo FM-AM Receiver	$149.95
Allied 929 4-speed Automatic Turntable	69.95
Base for Turntable	7.95
Empire 888E Stereo Elliptical Cartridge	39.95
Two Allied 3017 10″ 3-way Speaker Systems	99.90
SEPARATELY	$367.70
System Price	249.95
SYSTEM SAVINGS	$117.75

Specially selected component system features the Allied 339 40-watt solid-state Stereo FM-AM Receiver with metal case; takes optional walnut wood case at left. Allied 929 4-speed Automatic Turntable has perfect-pitch precision motor, cuing and stylus pressure adjustment. With Base. Empire 888E Stereo Cartridge has .0004x.0009″ elliptical diamond stylus for precision tracking. Allied 3017 three-way Speaker Systems have husky 10″ woofer for deep bass, 6″ direct-radiator midrange, plus a 3½″ cone tweeter. Handsome walnut-veneer finish with matching cane grille cloth. Complete with all cables and hi-fi booklet.

14 A 0219 D5Z. Shpg. wt., 84 lbs. 249.95

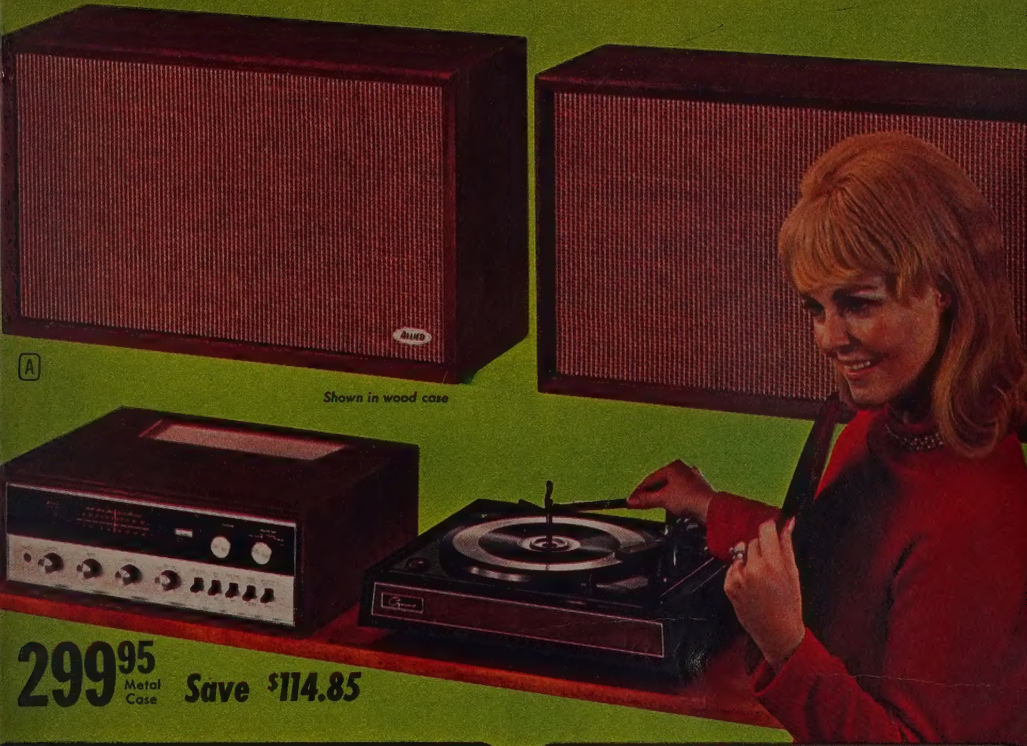
Ⓒ System with 8″ 2-way speakers

Allied 339 40-watt Stereo FM-AM Receiver	$149.95
Allied 919 4-speed Automatic Turntable	49.95
Base for Turntable	7.95
Shure M55E Stereo Elliptical Cartridge	29.95
Two Allied 3007 8″ 2-way Speaker Systems	49.90
SEPARATELY	$287.70
System Price	219.95
SYSTEM SAVINGS	$67.75

Our lowest priced 339 system offers outstanding performance and is an ideal choice for the audio buff on a tight budget. Features the Allied 339 40-watt solid-state Stereo FM-AM Receiver with metal case; takes optional walnut case at left. Allied 919 4-speed Automatic Turntable has counterbalanced pickup arm with stylus pressure adjustment. With Base. Shure M55E Stereo Cartridge has .0004x.0007″ elliptical diamond stylus. Allied 3007 two-way walnut Speaker Systems have 8″ woofer and 3½″ cone tweeter. Complete with all cables and hi-fi booklet.

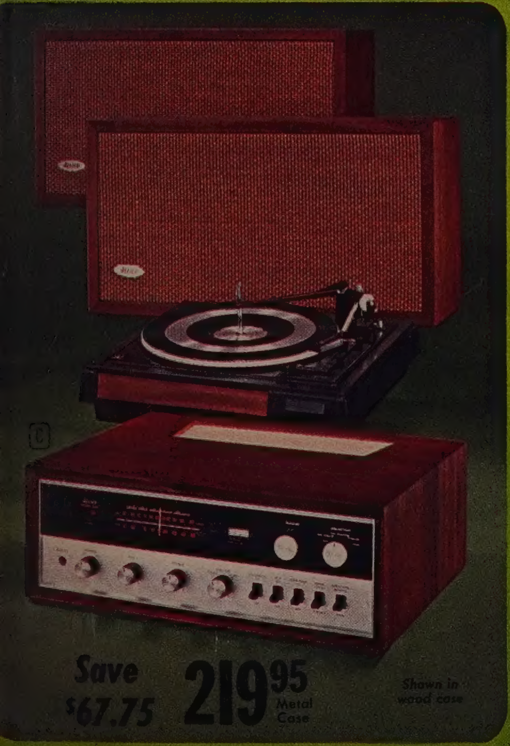
14 A 0218 D5Z. Shpg. wt., 74 lbs. 219.95

Allied has the finest selection of stereo systems



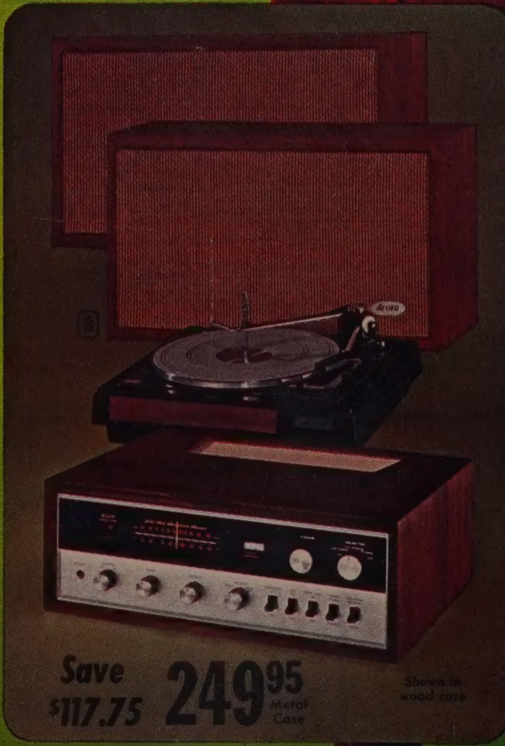
Shown in wood case

299^{95} Metal Case **Save \$114.85**



Save \$67.75 **219**^{95} Metal Case

Shown in wood case

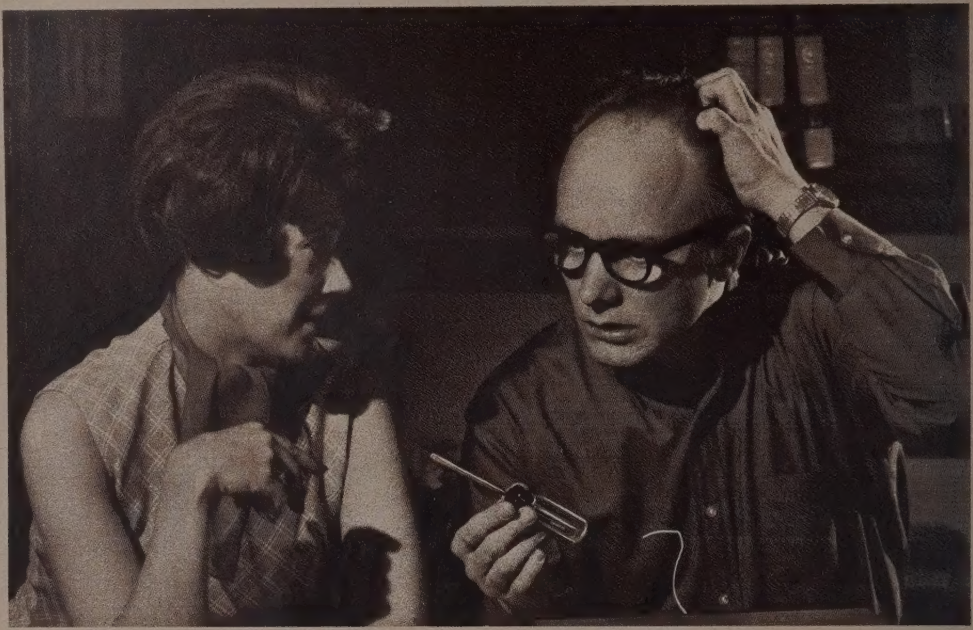


Save \$117.75 **249**^{95} Metal Case

Shown in wood case

Stereo systems are available on Credit Terms . . see page 438

My husband the Stereo expert . . .



My husband, the Stereo expert, likes music. But he isn't what you'd call handy. And he isn't an audio engineer. So when he decided to get a stereo hi-fi system from Allied, I had my doubts. I needn't have worried. All he did was plug it together—and it took just minutes. The sound is fabulous. I keep looking for an orchestra in our living room. Everyone's impressed by our component stereo hi-fi system . . .

And by my husband, the stereo expert.

Component stereo, the best stereo you can have, is simple to choose and easy to use. You pick out a record player, a receiver or amplifier, and speaker systems. Place the units where you wish and hook them together by plugging in a few cables. Then play it.

If you're unaccustomed to component stereo, you're in for an enjoyable surprise. Component stereo sounds like you're there.

That's because people who make stereo components (and this includes Allied) are single-minded fanatics. They concentrate on one thing: making that music sound like it did when it was recorded. Their only standard is: how perfectly does it recreate the sound of the original performance.

Not how well. How perfectly.

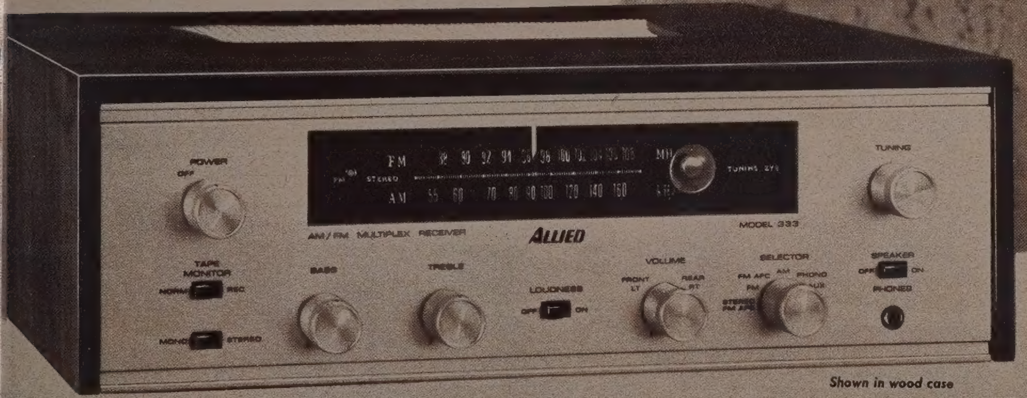
The components they make—the ones in this catalog—are generally too expensive for use in pre-packaged stereo consoles. Yet the system you choose from this catalog will probably cost much less than a pre-packaged console.

The reason is that component manufacturers don't have to worry about assembling complete consoles to sell at a certain price. They're not overly concerned about whether Italian Provincial or Louis Quinze or Morocco Modern is in vogue this year. They don't incur the costs of furniture, or assembling and shipping large consoles.

If you want great sound, pick out a component system offered in this catalog. Or select a system made up of components of your own choice. Allied will give you a special system price. See card opposite page 55.

Either way, you can use the money you save to buy some hi-fi cabinetry, if you want it. Allied sells that, too.

Great hi-fi, plus extras not expected at Allied's low price make this our best selling Stereo FM-AM Receiver


POWER
OFF
FM
STEREO
AM
TUNING EYE
TUNING
MODEL 333
AM/FM MULTIPLEX RECEIVER
ALLIED
TAPE MONITOR
NORM
REC
MONO
STEREO
BASS
TREBLE
LOUDNESS
OFF
ON
VOLUME
FRONT LT
REAR RT
SELECTOR
FM AFC
AM
PHONO
AUX
FM
STEREO FM AFC
SPEAKER
OFF
ON
PHONES

Shown in wood case

Allied® 40-watt full-feature Stereo FM-AM Receiver

12995 Metal case

$7 monthly*

Model 333. No other stereo FM-AM receiver offers so many extras for so little money! The 333 delivers crisp, clean 40-watt power for superb stereo realism. Feature-packed preamp has controls, inputs and outputs for every music program source. Deluxe FM tuner circuit has switchable AFC and time-switching multiplex for perfect mono and stereo FM reception. Wide slide-rule dial and velvet-smooth flywheel tuning assure precise, effortless FM and AM tuning. Magic Eye indicator accurately shows the strongest signal for the FM or AM station you want to receive. Also has stereo indicator light to indicate stereo FM reception.

Preamp features ganged bass and treble tone controls, six-position program selector switch, dual-concentric volume/balance control, mono/stereo mode switch, loudness contour and tape monitor for use with three-head tape machines. Other controls are separate AC power switch and speakers on/off switch. Stereo headphone jack. Handsome extruded aluminum front panel is Sierra Gold. Built-in ferrite AM antenna. With metal case. Takes optional walnut wood case below. Dependable 13-tube circuit. Size, 5$\frac{3}{8}$x15$\frac{13}{16}$x13$\frac{3}{16}$". For 10-127 V, 50-60 Hz AC. From Japan.

14 A 5073 U. Shpg. wt., 28 lbs. 129.95
14 A 5008 X. Oiled Walnut Wood Case. Shpg. wt., 5 lbs. 14.95

SPECIFICATIONS

FM TUNER CIRCUIT: *Usable IHF Sensitivity:* 3.0 μV. *Image Rejection:* better than 30 dB. *Channel Separation:* 30 dB. **AM CIRCUIT:** *Image Rejection:* better than 40 dB. **AMPLIFIER CIRCUIT:** *Power:* 40 watts ±1 dB; 32 watts IHF; 12 watts per channel rms. *Overall Frequency Response:* ±2 dB, 20-30,000 Hz. *Harmonic Distortion:* less than 1% at rated power output. *Hum and Noise:* −55 dB, mag. phono; −70 dB, auxiliary. *Inputs:* magnetic phono, ceramic phono or low-level auxiliary, high-level auxiliary or recorder. *Outputs:* 8 and 16 ohms, stereo headphones and tape recording. *Overall:* 13 tubes, two silicon rectifiers and eight diodes.

SELECTOR
FM AFC
AM
PHONO
AUX
FM
STEREO FM AFC

Selector switch has 6 positions for almost any program source

VOLUME
FRONT LT
REAR RT

Dual-concentric volume adjusts channels for perfect balance

TAPE MONITOR
NORM
REC

Tape monitor switch for use with three-head tape machines

SPEAKER
OFF
ON
PHONES

Stereo headphone jack with speaker on/off switch

See page 438 for full Credit details

POWER
OFF
TAPE MONITOR
NORM
REC
MONO
STEREO
FM
STEREO
AM
AM/FM MULTIPLEX RECEIVER
ALLIED
MODEL 333
BASS
TREBLE
LOUDNESS
OFF
ON
VOLUME
FRONT LT
REAR RT
SELECTOR
FM AFC
FM
PHONO
AUX
STEREO FM AFC
TUNING
SPEAKER
OFF
ON
PHONES

Shown in wood case

A

Save $114.85

269.95 Metal Case

B

Save $100.35

239.95 Metal Case

Save $60.35

C

199.95 Metal Case

Shown in wood case

For specifications on Allied's 333 Receiver, see page 11

Allied 40-watt Stereo FM-AM-Phono Systems

A Featuring Allied 3-way 12″ speaker systems

Allied 333 Stereo FM-AM Receiver	$129.95
Garrard SL65B 4-Speed Automatic Turntable	79.50
Base for turntable	5.50
Empire 888E Stereo Elliptical Cartridge	39.95
Two Allied 3030B 3-Way 12″ Speaker Systems	129.90
SEPARATELY	$384.80
System Price	**269.95**
SYSTEM SAVINGS	**$114.85**

Excellent true-to-life stereo at big savings. Handsomely designed Allied 333 40-Watt Stereo FM-AM Receiver has handsome front panel in Sierra Gold. With metal case; optional walnut case below. Garrard SL65B 4-Speed Synchro-Lab Automatic Turntable with Base. Cuing and pause control, optical-type stylus pressure adjustment, anti-skate compensation. Empire 888E Stereo Elliptical Cartridge with diamond stylus. Two Allied 3030B 3-Way 12″ Walnut Speaker Systems. Assembled and finished. 12″ woofer, 6″ midrange, direct-radiator 3½″ tweeter. All necessary audio cables and connectors. Allied Music System Instruction Booklet.

14 A 0052 D5Z. Shpg. wt., 103 lbs. 269.95
14 A 5008 X. Walnut Wood Case. Wt., 5 lbs. 14.95

B Outfit with 3-way 10″ speaker systems

Allied 333 Stereo FM-AM Receiver	$129.95
BSR McDonald 600 4-Speed Automatic Turntable	74.50
Base for turntable	6.00
Shure M55E Stereo Cartridge	29.95
Two Allied 3017 3-Way 10″ Speaker Systems	99.90
SEPARATELY	$340.30
System Price	**239.95**
SYSTEM SAVINGS	**$100.35**

Delivers dazzling stereo hi-fi at a moderate price. Allied 333 40-Watt Stereo FM-AM Receiver is exquisitely designed for your listening room. With metal case. Optional walnut case above. BSR McDonald 600 deluxe 4-Speed Automatic Turntable and base. Tubular pickup arm has fixed counterbalance, convenient stylus pressure adjustment. Oversized turntable, cuing lever. Shure M55E Stereo Elliptical Cartridge. Two Allied 3017 3-Way 10″ Walnut Shelf Speaker Systems. Beautifully crafted cabinet is sturdy ¾″ wood paneling with handsome oiled walnut veneer; cane grille. 10″ woofer, 6″ midrange, 3½″ tweeter. With cables and connectors, Music System Instr. Booklet.

14 A 0223 D5U. Shpg. wt., 86 lbs. 239.95

C Low-cost outfit with 8″ speaker systems

Allied 333 Stereo FM-AM Receiver	$129.95
BSR McDonald 400 4-Speed Automatic Turntable	49.50
Base for turntable	6.00
Shure M44E Stereo Cartridge	24.95
Two Allied 3007 2-Way 8″ Speaker Systems	49.90
SEPARATELY	$260.30
System Price	**199.95**
SYSTEM SAVINGS	**$ 60.35**

True hi-fi stereo sound at a surprisingly low price. Allied 333 40-Watt full-feature Stereo FM-AM Receiver with handsomely decorated front panel. With metal case; optional walnut case above. BSR McDonald 400 Automatic Turntable and base. Four-pole motor, counterbalanced arm with stylus pressure adjustment. Shure M44E Stereo Elliptical Cartridge. Two Allied 3007 Two-Way 8″ Walnut Shelf Speaker Systems. 8″ woofer delivers rich bass. Direct-radiator 3½″ tweeter for clean highs. Enclosed in a sturdy ¾″ hardwood cabinet with oiled walnut veneer finish, matching grille cloth. With all cables and connectors, Allied Music System Instruction Booklet.

14 A 0222 D5U. Shpg. wt., 78 lbs. 199.95

Shown in wood case

329.95 Metal Case **Save $140.85**

Our best stereo system with 333 Receiver features Argos 3-way 12″ speaker systems

Allied 333 Stereo FM-AM Receiver	$129.95
Garrard SL75B Automatic Turntable	109.50
Base for turntable	6.50
Pickering XV-15/200E Stereo Cartridge	44.95
Two Argos XL-500 3-Way 12″ Speaker Systems	179.90
SEPARATELY	$470.80
System Price	**329.95**
SYSTEM SAVINGS	**$140.85**

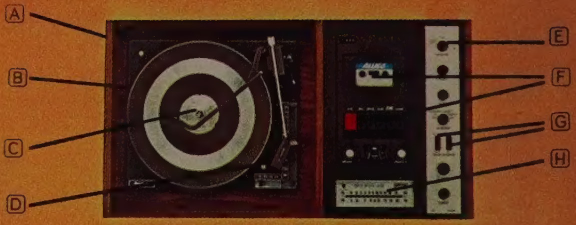
Outstanding selection of components for flawless reproduction of any music source. Allied 333 40-Watt Stereo FM-AM Receiver offers brilliant performance, handsome styling. Metal case included. Optional walnut wood case above, left. Garrard SL75B Automatic Turntable and base. Featuring Synchro-Lab motor, twin-braced low-mass pickup arm, adjustable counterweight. Operates at 33⅓, 45, 78. Pickering XV-15/200E Stereo Elliptical Cartridge. Two Argos XL-500 Three-Way Speaker Systems in walnut cabinets. Feature Jensen 12″ woofer, 8″ solid-back midrange, high-compression horn tweeter. Includes all necessary audio cables and connectors, Instruction Booklet.

14 A 0221 D5Z. Shpg. wt., 109 lbs. 329.95

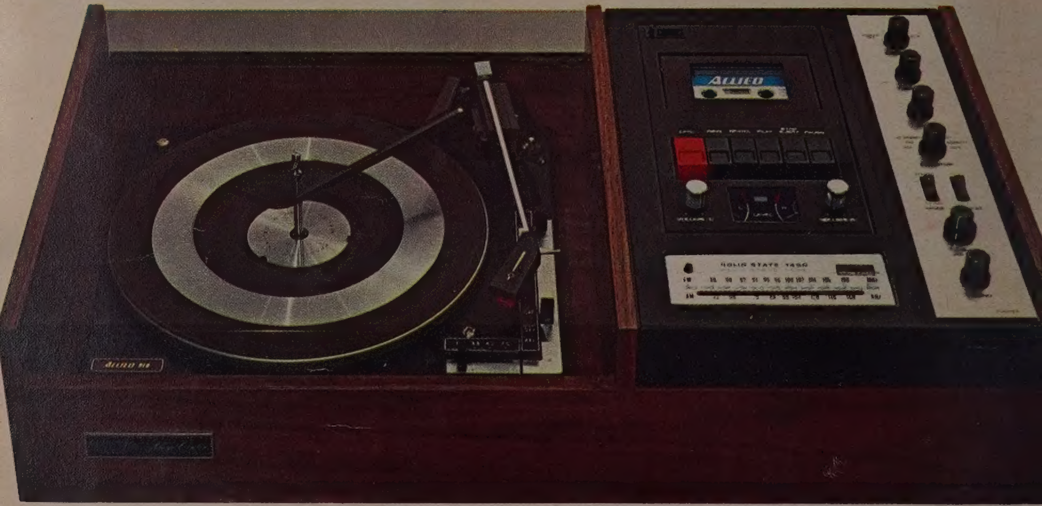
Allied® Music Center brings you total home stereo entertainment

349^{95} less speakers

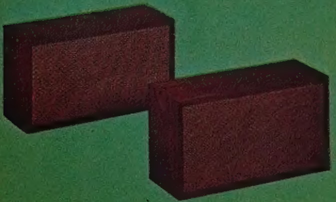
$17 monthly
see page 438



- A Oiled walnut-finish cabinet
- B 4-speed automatic turntable
- C Molded styrene dust cover
- D Magnetic stereo cartridge
- E Main/remote speaker switch
- F Stereo tape cassette recorder
- G Stereo/mono, loudness switch
- H Solid-state stereo FM-AM radio



Special offer with Allied Music Center



Music Center with Two Allied 3-way 10" Speaker Systems

Save $69.90 379^{95}

Separately, $449.85

Records and plays stereo tape cassettes..plays all records, stereo and mono..tunes stereo-FM and AM..55-watt amplifier..FETs and integrated circuits

Model 1450. Styling you would want in your home, plus performance to satisfy the stereo enthusiast. Luxurious all-wood cabinet fits atop record cabinet or coffee table . . has smart oiled walnut finish. *Four-Speed Automatic Turntable* has magnetic stereo cartridge with diamond stylus for dazzling stereo. Low-mass arm, anti-skate control, cuing and pause control, separate spindles for automatic and manual play. Includes molded styrene dust cover.

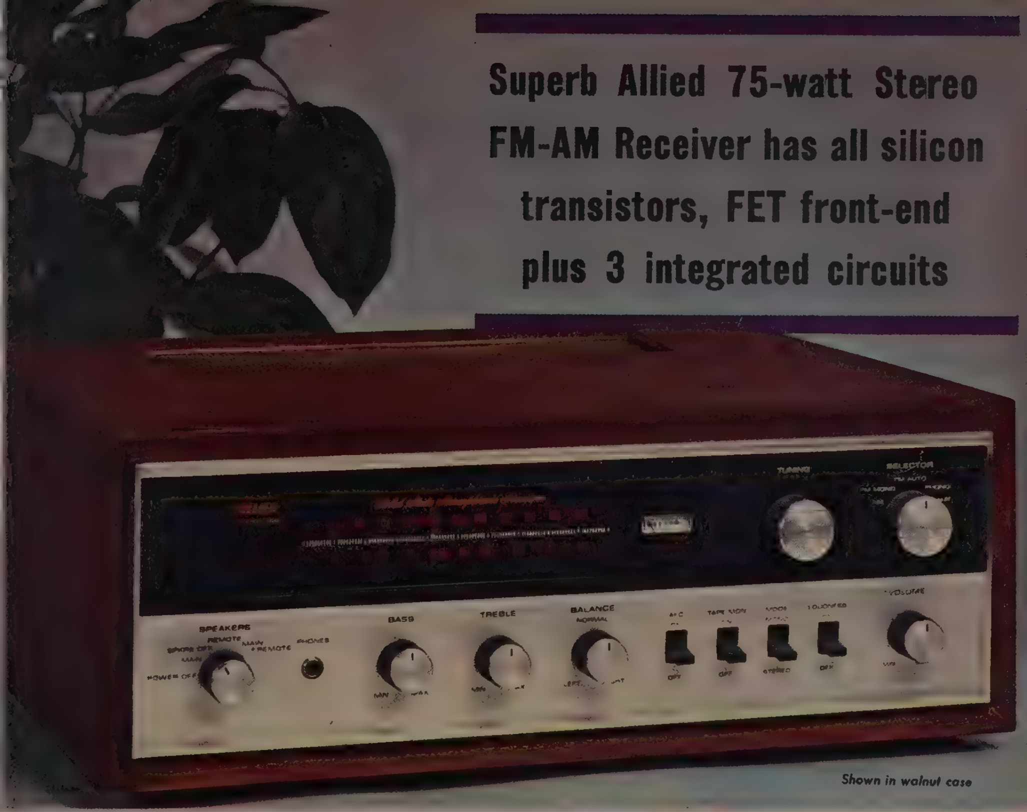
Stereo Cassette Recorder tapes direct from FM-AM, or records, or your own mikes. Plays back cassettes, stereo or monophonic, with wide response. Pop-up cassette loading, pushbutton controls, lighted dual recording level meter, separate level controls, push-to-reset digital counter. *Stereo FM-AM Tuner* boasts FETs in front end, all silicon transistors, plus integrated circuits and AFC for spectacular reception. Dial has unique point-of-light tuning indicator. Tuning meter. Stereo FM light. Sensitivity 3.0 μV on FM.

Stereo Amplifier has separate bass and treble controls, stereo-mono switch, loudness control. Mike inputs and stereo headphone jack behind hinged panel, tape and aux. inputs. Output at 4 ohms: 55 watts ±1 dB, 45 watts IHF, 17.6 watts/channel rms. 20-30,000 Hz, ±1 dB. Impedance, 4-16 ohms. AC convenience outlet. Built-in FM-AM antennas. 8¾x26¾x14¼". Mikes and speakers optional. (3017 speakers on page 73). 117 VAC. Japan.

14 A 5050 Z. Shpg. wt., 38 lbs. **349.95**
14 A 0360 L3Z. With Two 3017 10" Walnut Speaker Systems. 88 lbs. . . . **379.95**

SHIPPING NOTE: Items with suffix U, W or Z in stock no. sent truck or express. See Ordering Information pages.

Superb Allied 75-watt Stereo FM-AM Receiver has all silicon transistors, FET front-end plus 3 integrated circuits



Shown in walnut case

Years-ahead circuit pulls in all stations, weak or strong, without distortion . . rejects unwanted signals ... Silicon transistors pour out power to spare for stereo with full dynamic range that recreates the music hall

189^{95} Metal Case

$10 monthly*

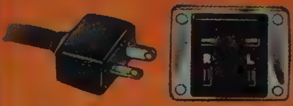
Model 369. Certain to be one of the best sellers of the year! Moderately-priced stereo FM-AM receiver offers nearly every feature you could want, plus stereo realism to satisfy any audiophile. Advanced design all-silicon solid-state circuit boasts three integrated circuits, FET front end, automatic stereo-mono switching circuit, output transistor protection, direct-coupled transformerless output for extra-wide power bandwidth, and more. Delivers a breathtaking 75-watt power output, ±1 dB at 4 ohms, for distortionless stereo even on the loudest musical passages.

Accommodates every stereo source: inputs for magnetic phono, tape, ceramic phono, aux. Tape monitor. Controls for bass, treble, volume, balance; main/remote/both/off speaker switch; stereo headphone jack. Loudness control assures full response even at low listening levels. AFC locks-in FM stations. Slide-rule tuning dial, tuning meter, stereo indicator. Two AC convenience outlets on rear, one switched. FM dipole antenna. With metal case. Optional wood case below. 5½x16x13¾". 117 VAC. Japan.

14 A 5069 U. Shpg. wt., 28 lbs.	189.95
14 A 5003 X. **Oiled Walnut Wood Case.** Shpg. wt., 6 lbs.	19.95

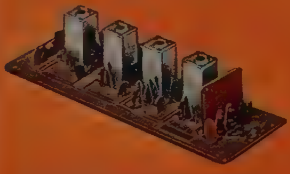
SPECIFICATIONS

AMPLIFIER CIRCUIT. *Power Output at 4 ohms:* 75 watts ±1 dB, 60 watts IHF, 20 watts/channel rms. *Response:* ±3 dB, 20-50,000 Hz. *IM Distortion:* less than 2%. *Channel Separation:* better than 35 dB at 10 kHz. *Hum and Noise:* Magnetic Phono, —60 dB; Aux., —70 dB. *Input Sensitivity:* Mag. Phono, 3 mV; Aux., 300 mV; Tape Monitor, 300 mV. **TUNER CIRCUIT.** *FM Sensitivity:* 2.0 μV. *Harmonic Distortion:* 0.7%. *Selectivity:* 35 dB. *Separation:* better than 25 dB at 1000 Hz. *Signal to Noise:* better than 56 dB. *Capture Ratio:* 2 dB. *Image Rejection:* better than 40 dB.



Special speaker connectors prevent shorts . . polarized for easy speaker phasing

Has 2 integrated circuits in the IF stage, plus an integrated circuit in stereo FM stage



Completely automatic Schmidt all-electronic stereo-mono FM switching circuit

*No money down, low monthly payments . . see page 438

Save $84.85 **299.95** Metal Case

Our lowest priced 60-watt system features Allied 3-way 10″ shelf speaker systems

Allied 369 Stereo FM-AM Receiver	$189.95
Garrard SL55B Automatic Turntable	59.50
Base for turntable	5.50
Empire 808E Stereo Elliptical Cartridge	29.95
Two Allied 3017 3-Way 10″ Speaker Systems	99.90
SEPARATELY	**$384.80**
System Price	**299.95**
SYSTEM SAVINGS	**$ 84.85**

Selected to provide top value for your dollar. Features the Allied 369 60-Watt Solid-State Stereo FM-AM. Receiver. FET front-end, three integrated circuits. Tape monitoring facility. Handsome modern styling. With metal case. Optional oiled walnut case above. Garrard SL55B 4-Speed Automatic Turntable with base. Anti-skating compensation, stylus pressure adjustment. Empire 808E Stereo Elliptical Cartridge with diamond stylus. Two Allied 3017 Three-Way Shelf Speaker Systems. 10″ woofer, 6″ midrange, 3½″ tweeter. Sturdy ¾″ wood paneling with handsome oiled walnut veneer; cane grille cloth. All necessary audio cables and connectors, Allied Music System Instruction Booklet.
14 A 0230 D5U. Shpg. wt., 86 lbs. 299.95

Allied 60-watt stereo FM-AM phono systems at big savings

Ⓐ Featuring Goodmans 12″ speaker systems

Allied 369 Stereo FM-AM Receiver	$189.95
Garrard SL75B Automatic Turntable	109.50
Base for turntable	6.50
Shure M91E Stereo Elliptical Cartridge	49.95
Two Goodmans G-20 3-Way 12″ Speaker Systems	199.90
SEPARATELY	**$555.80**
System Price	**399.95**
SYSTEM SAVINGS	**$155.85**

Superb quality system offers exceptional performance. Features the Allied 369 60-Watt Solid-State Stereo FM-AM Receiver, one of our newest models. FET front-end, three integrated circuits. Output for two pairs of stereo speakers. With metal case. Optional walnut case below. Garrard SL75B Automatic Turntable with base, 33⅓. 45, 78 rpm. Synchro-Lab motor for perfect speed accuracy. Shure M91E Stereo Elliptical Cartridge with diamond stylus. Two Goodmans G-20 Three-Way 12″ Speaker Systems. 12″ woofer, 6″ midrange, 3½″ tweeter. Walnut veneer. Cables, connectors, hi-fi booklet.
14 A 0229 D5Z. Shpg. wt., 129 lbs. 399.95
14 A 5003 X. Oiled Walnut Case. Wt., 6 lbs. 19.95

Ⓑ With deluxe Allied speaker systems

Allied 369 Stereo FM-AM Receiver	$189.95
Garrard SL65B Automatic Turntable	79.50
Base for turntable	5.50
Pickering V15/ATE-3 Stereo Elliptical Cartridge	39.95
Two Allied 2330A 3-Way 12″ Speaker Systems	159.90
SEPARATELY	**$474.80**
System Price	**349.95**
SYSTEM SAVINGS	**$124.85**

Great value in a quality stereo system at big savings. Allied 369 60-Watt Solid-State Stereo FM-AM Receiver. FET front-end, three integrated circuits. Has loudness and muting switches. With metal case. Optional oiled walnut case above. Garrard SL65B 4-Speed Automatic Turntable with base. Synchro-Lab motor. Cast, balanced oversize turntable. Plays up to six records automatically or operates manually. Pickering V15/ATE-3 Stereo Elliptical Cartridge with diamond stylus. Two Allied 2330A Three-Way 12″ Speaker Systems. 12″ woofer, 8″ midrange, 3½″ tweeter. Assembled and finished in oiled walnut. With all cables and connectors, hi-fi booklet.
14 A 0231 D5Z. Shpg. wt., 112 lbs. 349.95

Ⓒ Featuring Allied speaker systems

Allied 369 Stereo FM-AM Receiver	$189.95
Garrard SL65B Automatic Turntable	79.50
Base for turntable	5.50
Shure M55E Stereo Elliptical Cartridge	29.95
Two Allied 3030B 3-Way 12″ Speaker Systems	129.90
SEPARATELY	**$444.80**
System Price	**329.95**
SYSTEM SAVINGS	**$104.85**

Enjoy excellent stereo sound at a surprisingly low price. Allied 369 Stereo FM-AM Receiver. FET front-end, three integrated circuits. Styled to grace any decor. With metal case. Optional walnut case above. Garrard SL65B 4-speed Automatic Turntable with base. Synchro-Lab motor, cuing and pause control, optical-type stylus pressure adjustment, anti-skate compensation. Shure M55E Stereo Elliptical Cartridge with diamond stylus. Two Allied 3030B 3-Way 12″ Shelf Speaker Systems. 12″ woofer, 6″ midrange, 3½″ tweeter. Factory assembled and finished in oiled walnut. With all necessary cables and hi-fi booklet.
14 A 0232 D5Z. Shpg. wt., 102 lbs. 329.95

SHIPPING NOTE: Items with suffix U, W or Z in stock no. sent truck or express. See Ordering Information pages

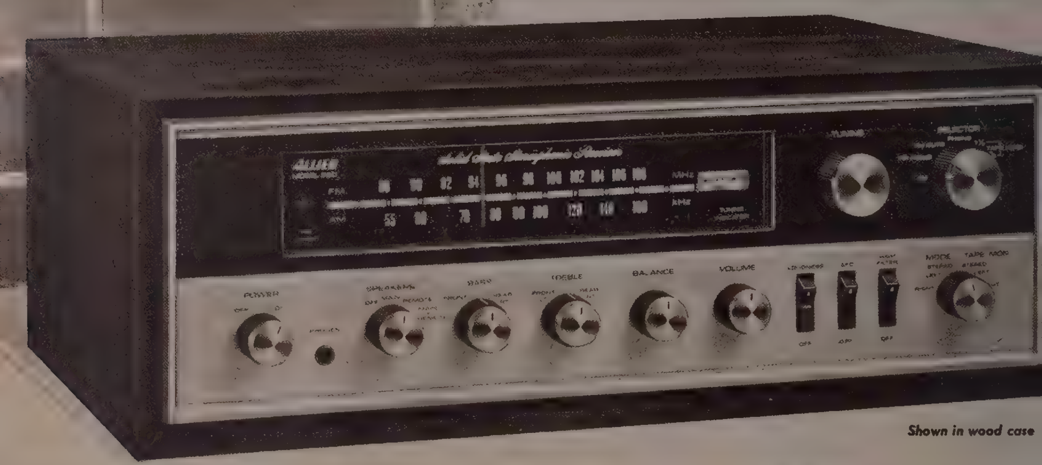
399⁹⁵ Metal Case **Save $155.85**

Save $124.85 **349⁹⁵** Metal Case

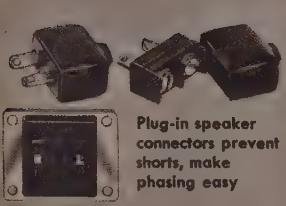
Save $104.85 **329⁹⁵** Metal Case

NOTE: For full specifications on Allied Model 360 Receiver, see page 15. Receiver includes metal case, but is shown in optional wood case.

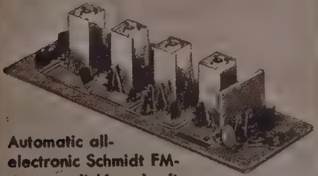
All silicon transistors, FET's for FM, integrated circuits, and 110 watts of power make this one of our best values



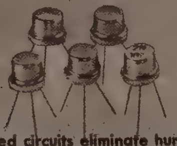
Shown in wood case



Plug-in speaker connectors prevent shorts, make phasing easy



Automatic all-electronic Schmidt FM-stereo switching circuit



Integrated circuits eliminate hundreds of soldered connections for super reliability and stability and improvment of overall performance

Allied solid-state 110-watt Stereo FM-AM receiver

249.95 Metal Case

Model 380. Loaded with extras for outstanding performance and control convenience. Solid-state circuit has field-effect transistors in front-end to pull-in weak stations and also reject signals from unwanted stations. Four integrated circuits in super-selective IF stage. Transformerless output for wide frequency response of 20-70,000 Hz. Delivers 110-watt power for full-dimensional stereo. Fine monophonic FM and AM, too.

FM circuit has Schmidt all-electronic automatic stereo-mono switching. Preamp offers facilities for all sources including tape monitor, and input for tape transport equalized at both 7½ and 3¾ ips speeds. Signal-strength meter and stereo indicator light for accurate tuning. AFC locks in FM signals. Loudness control for full response even at low volume levels. Dual-concentric bass and treble controls. Front-panel stereo headphone jack. High-frequency filter cuts record scratch or static on AM.

Ferrite AM antenna, FM dipole. Two AC outlets. With transistor output protection. With shortproof polarized speaker connectors. Speaker switch selects main, remote, both or off. With metal case. Optional wood case below. 5x16x12". For 110-120 volts, 50-60 Hz AC. From Japan.

14 A 5076 U. Shpg. wt., 28 lbs.	249.95
14 A 5003 X. Oiled Walnut Wood Case. Shpg. wt., 6 lbs.	19.95

SPECIFICATIONS

AMPLIFIER CIRCUIT. *Power Output at 4 Ohms:* 110 watts ±1 dB, 80 watts IHF, 32 watts rms per channel. *Frequency Response:* ±2 dB, 20-70,000 Hz. *Harmonic Distortion:* approximately 1%. *Hum and Noise:* Magnetic Phono, −63 dB; Aux., −78 dB. *Input Sensitivity:* Mag. Phono, 3.5 mV; Ceramic/Crystal Phono, 60 mV. Aux., 220 mV; Tape Monitor, 220 mV; Tape Head, 3.5 mV. *Outputs:* 4-16 ohms, headphones, recorder. **TUNER CIRCUIT. FM.** *IHF Sensitivity:* 1.8 μV. *Separation:* better than 35 dB. *Capture Ratio:* 3.5 dB. *Signal-to-noise ratio:* better than 56 dB. **AM:** *Sensitivity:* 14 μV for 10 dB S/N ratio.

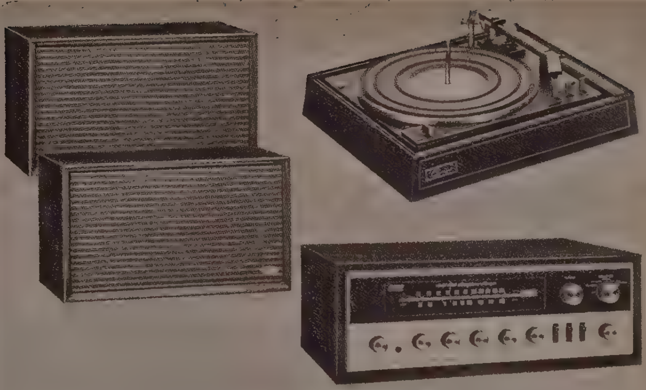
Stereo FM-AM Phono Systems

Our best 110-watt System

380 Stereo FM-AM Receiver	$249.95
Garrard SL75B Turntable	109.50
Base for turntable	6.50
Pickering V15/AME-3 Cartridge	44.95
Two Allied 2300C Speakers	199.90
TOTAL	$610.80
Outfit Price	449.95
YOU SAVE	$160.85

Exceptional value in a complete stereo system featuring the Allied 380 110-Watt Solid-State FM-AM Receiver. Handsome styling, full controls. Garrard SL75B Automatic Turntable has Synchro-lab motor for perfect 33⅓, 45 and 78 speeds. With base, Pickering V15/AME-3 stereo elliptical cartridge with diamond stylus. Two Allied 2300C 3-Way 12" Walnut Shelf Speaker Systems. 12" woofer, horn midrange and compression tweeter. Cables, hi-fi booklet, instructions.

14 A 0227 D5Z. Wt., 145 lbs. . . . 449.95



Save $160.85

449^{95} Metal Case

$20 monthly see page 438

Deluxe 110-watt System

380 Stereo FM-AM Receiver	$249.95
Garrard SL65B Turntable	79.50
Base for turntable	5.50
Shure M55E Cartridge	29.95
Two Allied 2330A Speakers	159.90
TOTAL	$524.80
Outfit Price	389.95
YOU SAVE	$134.85

Excellent system of quality components featuring Allied 380 110-Watt Solid-State Stereo FM-AM Receiver. Superior stereo FM plus brilliant AM. Garrard SL65B Automatic Turntable has Synchro-lab motor for perfect speed. Four-speed automatic or manual. With base, Shure M55E stereo elliptical cartridge with diamond stylus. Two Allied 2330A 3-Way Shelf Systems. 12" woofer. 8" midrange, 3½" tweeter. Walnut. With cables, instr.

14 A 0226 D5Z. Wt., 112 lbs. . . . 389.95

Save $134.85

389^{95} Metal Case

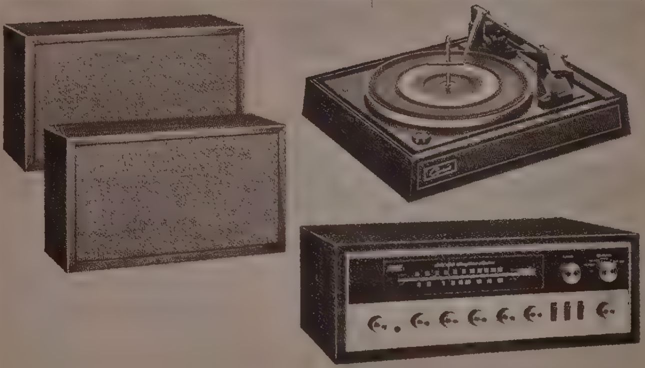
$18 monthly see page 438

Economy 110-watt System

380 Stereo FM-AM Receiver	$249.95
Garrard SL55B Turntable	59.50
Base for turntable	5.50
Empire 808E Stereo Cartridge	29.95
Two Allied 3017 Speakers	99.90
TOTAL	$444.80
Outfit Price	329.95
YOU SAVE	$114.85

Enjoy the thrilling sound of true-to-life stereo realism with this sytem. Allied 380 110-Watt Solid-State FM-AM Receiver will enhance any living room. Garrard SL55B 4-speed Automatic Turntable has Synchro-lab motor for perfect speed. With base, Empire 808E stereo elliptical cartridge with diamond stylus. Two Allied 3017 3-Way Walnut Shelf Speaker Systems. 10" woofer, 6" midrange, 3½" tweeter. Walnut. With cables, instructions.

14 A 0228 D5U. Wt., 85 lbs. . . . 329.95



Save $114.85

329^{95} Metal Case

$16 monthly see page 438

For complete specifications on Allied 380 Receiver, see facing page

Experts at High Fidelity Magazine praise our best Allied® Receiver. Here's what they say . .

"Allied 395 offers features and performance that are distinctly bette than average. . . . The tuner section . . . is a real winner. Stations seem t pop in all up and down the dial. . . . Audio response on mono FM is good; i actually improves on stereo FM. . . . Channel separation is excellent. . . . the entire tuner portion of this receiver suggests much costlier equipment. . . S/N figures on magnetic phono and tape playback inputs, in particular, are excellent. . . . Styling and control features have not been skimped on i this set." (From February, 1969 issue.)

SPEAKERS
BASS
TREBLE
BALANCE
VOLUME
POWER OFF
PHONES

Shown in wood case

Plug-in speaker connectors make speaker phasing easy, prevent shorts and overloads

SPEAKERS
REMOTE
MAIN
MAIN + REMOTE
POWER OFF
SPEAKER OFF
PHONES

Five-position switch controls AC power, speaker systems and stereo headphone jack

Advanced FM circuit has field-effect-transistors and integrated circuits

Allied 195-watt solid-state Stereo FM-AM Receiver

29995 Metal Case

Model 395. Our finest and most powerful receiver. Field-effect-transistor in the RF stage and integrated circuits in the IF section pull in stereo FM that must be heard to be believed. Sensitivity and selectivity are so goo that you'll tune in stations you've never heard before. Nothing has been skimped on in the AM circuit either . . local stations will come in with fidelity rivaling some FM stations. The full-feature preamp has all the controls and inputs you'll ever need. All silicon transistors, plus 195 watts o power give you the finest stereo hi-fi possible.

Preamp has volume, balance, and dual-concentric bass and treble controls Switch selects AM, FM Mono, FM Automatic, Phono, Aux, *plus* Tape Hea equalized at either 3¾ or 7½ ips. Rocker switches control loudness contour scratch and rumble filters, between-station silencing on FM, Phono 1 and 2 and AFC. Five-position switch for AC power, main speakers, remote speakers, main-plus-remote speakers, and speakers off. Mode/monitor switch fo stereo, left and right channels. Also has signal-strength tuning meter stereo FM indicator light, flywheel tuning, and stereo headphone jack With metal case. Takes optional wood case below. For 110-120 VAC. Size 5½x16x13¾". From Japan.

14 A 5074 U. Shpg. wt., 30 lbs. 299.9
14 A 5003 X. Oiled Walnut Wood Case. Shpg. wt., 6 lbs. 19.9

SPECIFICATIONS

AMPLIFIER CIRCUIT: *Power Output at 4 ohms:* 195 watts ±1 dB; 160 watt IHF; 55 watts rms per channel. *Frequency Response:* ±1.5 dB, 15-100,00 Hz. *Harmonic Distortion:* 1%. *Hum and Noise:* down more than −80 dB *Inputs:* mag. (2) and ceramic phono, tape head, tape monitor and auxiliary *Outputs:* 4-16 ohms; tape and stereo headphones. **TUNER CIRCUIT: FM Section** *IHF Sensitivity:* 1.4, µV. *Harmonic Distortion:* 0.8%. *Sep.:* over 35 dB *S/N Ratio:* 69 dB. *Capture Rato:* 0.95 dB. **AM Section.** *Sensitivity:* 5 µV

SHIPPING NOTE: All items with suffix U, W or X in stock no. truck or express. See Ordering Information page

Receiver shown in wood case

Allied's finest Stereo FM-AM-Phono System

Save $195.85 549^{95} Metal Case

Allied 395 195-watt solid-state Stereo FM-AM Receiver	$299.95
Garrard SL95B 3-speed Automatic Turntable	129.50
Model B-2 Base for turntable	6.50
Pickering XV-15/400E Elliptical Stereo Cartridge	49.95
Two Allied 2370 three-way 12″ Speaker Systems	259.90
SEPARATELY	$745.80
System Price	549.95
SYSTEM SAVINGS	$195.85

Our best stereo FM-AM-phono system features the Allied 395 with metal case; takes optional wood case below. Garrard SL95B 3-speed Automatic Turntable has cuing, stylus pressure gauge, antiskate adjustment and Synchro-Lab motor. With base. Pickering XV-15/400E Stereo Elliptical Cartridge. Allied 2370 three-way 12″ acoustic-suspension Speaker Systems have 12″ woofer, compression midrange with diffraction horn, and horn-loaded compression tweeter. With cables and hi-fi booklet.

14 A 0225 D5Z. Shpg. wt., 149 lbs. 549.95

14 A 5003 X. Walnut Wood Case. Shpg. wt., 6 lbs. 19.95

Our finest System plus Allied 3-head Stereo Tape Deck

Separately, $925.75. An audiophile's dream! Our best system, shown above, *plus* the Allied TD-1095 Deck with silicon transistors for finest sound. Three heads permit tape monitoring, sound-on-sound and echo. 7½, 3¾ or 1⅞ ips. Pause control, automatic shutoff, automatic tape ifters, monitor switch, sound-with-sound, level meters, counter and headphone jack. 4-pole motor for low flutter and wow, less than 0.2% at 7½ ips. Response: ±3 dB, 30-20,000 Hz at 7½ ips. Wood case has walnut vinyl cover. Patch cords, 7″ takeup reel, cables, booklet.

14 A 0233 D6Z. Shpg. wt., 181 lbs. 695.95

Allied® TD-1095 3-head Stereo Tape Deck with above System . . . our "everything" System!

695^{95}

Save $229.80

See page 120 or back cover for more specs on Allied TD-1095 Deck

Save $155.85 499^{95} Metal Case

399^{95} Metal Case Save $144.85

449^{95} Metal Case Save $134.85

Allied 195-watt Stereo Systems

A Deluxe Stereo System

Allied 395 195-watt solid-state Stereo FM-AM Receiver	$299.95
Garrard SL75B three-speed Automatic Turntable	109.50
B-2 Base for turntable	6.50
Empire 888E Elliptical-stylus Stereo Cartridge	39.95
Two Goodmans G-20 three-way 12″ Speaker Systems	199.90
SEPARATELY	**$655.80**
System Price	**499.95**
SYSTEM SAVINGS	**$155.85**

Features the Allied 395 195-watt stereo FM-AM Receiver. Metal case. Garrard SL75B 3-speed Automatic Turntable. Walnut Base. Empire 888E Cartridge. Two Goodmans G-20 3-way 12″ speaker systems. Optional wood case below. Cables, hi-fi booklet. Shpg. wt., 131 lbs.

14 A 0362 D5Z....................499.95
14 A 5003 X. Wood Case. 6 lbs.....19.95

B Budget Stereo System

Allied 395 195-watt solid-state Stereo FM-AM Receiver	$299.95
Garrard SL65B four-speed Automatic Turntable	79.50
B-1 Base for turntable	5.50
Empire 808E Elliptical-stylus Stereo Cartridge	29.95
Two Allied 3030B three-way 12″ Speaker Systems	129.90
SEPARATELY	**$544.80**
System Price	**399.95**
SYSTEM SAVINGS	**$144.85**

Great value in a quality system. Features the Allied 395 solid-state stereo FM-AM Receiver. Metal case. Walnut wood case above. Garrard SL65B 4-speed Automatic Turntable. With Walnut Base. Empire 808E Cartridge. Two Allied 3030B 3-way 12″ speaker systems. Cables, booklet. Wt., 104 lbs.

14 A 0364 D5Z....................399.95

C Special Stereo System

Allied 395 195-watt solid-state Stereo FM-AM Receiver	$299.95
Garrard SL65B four-speed Automatic Turntable	79.50
B-1 Base for turntable	5.50
Shure M93E Elliptical-stylus Stereo Cartridge	39.95
Two Allied 2330A three-way 12″ Speaker Systems	159.90
SEPARATELY	**$584.80**
System Price	**449.95**
SYSTEM SAVINGS	**$134.85**

Powerful system features the Allied 395 solid-state stereo FM-AM Receiver. Metal case. Optional wood case above. Garrard SL65B 4-speed Automatic Turntable, with walnut base. Shure M93E stereo elliptical Cartridge. Two Allied 2330A 3-way 12″ speaker systems. Cables, hi-fi booklet. Shpg. wt., 114 lbs.

14 A 0363 D5Z....................449.95

Lowest priced Allied Stereo FM-AM Receiver

Includes oiled walnut wood case

Indicator light flashes on when you're tuned to stereo FM

Input selector lets you choose stereo FM, FM, AM, tape

Signal-strength meter for always-perfect FM and AM tuning

Unbeatable value! Just add speakers for component-type solid-state stereo at a low, low price you'd never have thought possible.. inputs for phono and tape, too

89^{95}

$5 monthly
see page 438

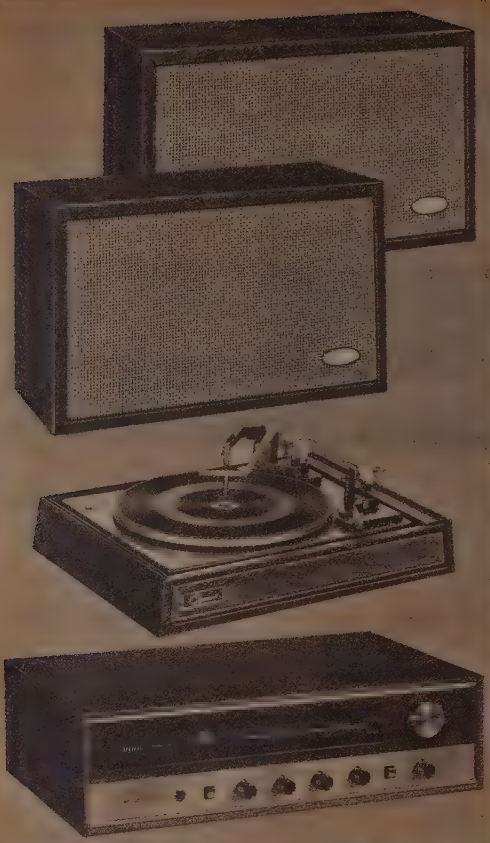
Model 325. Only Allied could give you a *solid-state* stereo receiver, with so many important features, at such a low price. All-semiconductor circuit pulls in full-fidelity stereo FM, plus good-quality AM, and develops a full 30 watts of peak music power for plenty of volume without distortion. Preamp includes selector switch and inputs for plugging in a tape deck or player, and a stereo record changer with ceramic cartridge. Has pushbutton switches for AC on-off and AFC on-off. Also has separate bass and treble controls, channel balance controls. Features genuine D'Arsonval signal-strength tuning meter for always-perfect tuning of FM and AM stations. Illuminated slide-rule dial. Panel light flashes on whenever you're tuned to an FM stereocast. There's even a headphone jack for listening to stereo, at high volume, without disturbing others. Has built-in FM and AM antennas, plus terminals for adding outdoor FM antenna to pull in more stations. Low price includes handsome all-wood case with walnut veneer. From Japan.

14 A 5079 U. Shpg. wt., 21 lbs..89.95

SPECIFICATIONS

FM CIRCUIT. *Sensitivity:* $3\ \mu V$ for 30 dB quieting. *Image Rejection:* 45 dB. FM MULTIPLEX CIRCUIT. *Channel Separation:* 26 dB. AM CIRCUIT. *Image Rejection:* 36 dB. AMPLIFIER CIRCUIT. *Power Output at 4 ohms:* 19 watts ±1 dB; 15 watts IHF, 30 watts peak, 7.5 watts rms. *Frequency Response:* 40-15,000 Hz. *Harmonic Distortion:* 1.5%. *Inputs:* Ceramic Phono; Preamplified Tape. *Speaker Output:* 8 ohms. *Overall:* 21 transistors, 17 diodes. *Power Requirements:* 110-120 V, 60 Hz AC.

NOTE: For full specifications on Allied Model 395 receiver, see page 20. Receiver includes metal case, but is shown in optional wood case.



Save $44.90 139^{95}

Save $74.90 159^{95}

Stereo FM-AM-Phono Systems with Allied 325 Receiver

Allied 325 Ensemble with 8" speaker system

Allied 325 Solid-State Stereo FM-AM Receiver	$89.95
Garrard 30 Automatic Turntable with Stereo Cartridge	39.50
Base for Garrard Turntable	5.50
Two Allied 3007 2-Way 8" Speaker Systems	49.90
SEPARATELY	$184.85
System Price	139.95
SYSTEM SAVINGS	**$44.90**

Here's a genuine component stereo system actually priced as low as many portable phonos. Allied 325 solid-state Stereo FM-AM Receiver featuring signal-strength meter for precision FM and AM tuning, AFC, stereo indicator light, and stereo headphone jack. Includes walnut-veneer wood case. Garrard 30 Four-Speed Automatic Stereo Turntable with ceramic stereo cartridge and long-lasting diamond stylus. Two Allied 3007 Two-Way 8" Walnut Shelf Speaker Systems. The 8" woofer delivers rich lows down to 50 Hz. Direct-radiator 3½" tweeter gives good, clean highs to 15,000 Hz. All necessary audio cables and connectors, two 15-ft. speaker cables, instruction booklet.

14 A 0029 L5U. Shpg. wt., 70 lbs. 139.95

Allied 325 Ensemble with 10" speaker system

Allied 325 Solid-State Stereo FM-AM Receiver	$89.95
Garrard 30 Automatic Turntable with Stereo Cartridge	39.50
Base for Garrard Turntable	5.50
Two Allied 3017 3-Way 10" Speaker Systems	99.90
SEPARATELY	$234.85
System Price	159.95
SYSTEM SAVINGS	**$74.90**

Allied 325 Stereo FM-AM Receiver features stereo indicator light which flashes when you're tuned to stereo FM. AFC, signal-strength meter, channel balance control, input selector switch for stereo FM, FM, AM, phono, tape. Includes handsomely designed walnut-veneer wood case. Garrard 30 Four-Speed Automatic Stereo Turntable with ceramic stereo cartridge and long-lasting diamond stylus. Two Allied 3017 Three-Way 10" Walnut Shelf Speaker Systems. Includes a 10" woofer for deep, resonant bass, smooth 6" midrange, and 3½" tweeter that delivers pure, brilliant highs. 40-17,000 Hz. All audio cables and connectors, Allied Music System Instruction Booklet.

14 A 0200 L5U. Shpg. wt., 78 lbs. 159.95

Only Allied sells this Scott Receiver at a price so low . . IC's, FET's and 125-watt output give superb stereo FM

Cut
$50.00
249^{95} less case
$13 monthly*

Model 344C. *Was $299.95.* Allied's special purchase makes possible this exclusive low price on one of Scott's finest stereo FM receivers! Silver-plated field-effect-transistor front end and integrated circuit IF stages for noise-free reception. Flywheel-weighted knob, signal-strength meter, stereo indicator light and between-station quieting make tuning easier. Feature-packed preamp has front panel microphone input and stereo headphone jacks, volume, balance, dual concentric bass and treble controls. Computer-type pushbuttons control loudnesss compensation, tape monitor, mono/stereo mode switch, noise filter, FM interstation muting, main and remote speaker systems. Inputs: magnetic phono, tape, FM, mike and auxiliary. Outputs: 4-16 ohms, tape and headphones. Power Output at 4 ohms: 125 watts ±1 dB, 90 watts IHF, 35 watts rms per channel. Response: ±1 dB, 15-30,000 Hz. FM Sensitivity: 1.9 μV IHF. 5½x17⅛x13". Takes optional case below. For 115 VAC.

13 A 2714 U. Shpg. wt., 25 lbs.	249.95
13 A 2733 X. Oiled Walnut Wood Case. Shpg. wt., 6 lbs.	26.95

Silicon transistor transformerless output assures cooler operation plus lower noise, wide frequency response and power bandwidth with virtually unmeasurable distortion—even at high listening levels!

Available at this low price only from Allied . . Kenwood 75-watt solid-state Stereo FM Receiver with FET's

Cut
$40.00
159^{95}
$8 monthly*

Model TK-55. *Was $199.95.* Exclusive low Allied price on this Kenwood receiver. Field-effect-transistor front end and highly selective IF circuit with five stages and four limiters for outstanding, static-free reception. Automatic stereo/mono FM switching, flywheel-weighted knob, signal-strength meter and stereo indicator light make accurate tuning a breeze. Preamp has tape monitoring facilities for use with a 3-head stereo tape deck. Stereo headphone jack permits listening to hi-fi in privacy. Dual concentric volume, bass and treble controls let you tailor the sound to suit your taste or the acoustics of the listening room. Rocker switches control loudness compensation, noise filter, tape monitor and mono/stereo mode. Also has provision for two sets of speaker systems. Inputs: magnetic phono, tape and FM. Outputs: 4-16 ohms, tape and headphones. Power Output at 4 ohms: 75 watts ±1 dB, 60 watts IHF, 20 watts rms per channel. Response: ±2 dB, 20-50,000 Hz. FM Sensitivity: 2.5 μV IHF. With attractive walnut-finish metal case. Size, 5x16½x12". For 115 VAC. From Japan.

13 A 2442 U. Shpg. wt., 20 lbs.	159.95

Handsome walnut finish metal cabinet and stylish silver-gold front panel with two-tone brown trim will complement anyone's decorating scheme . . your Kenwood will keep its attractive good looks for years to come

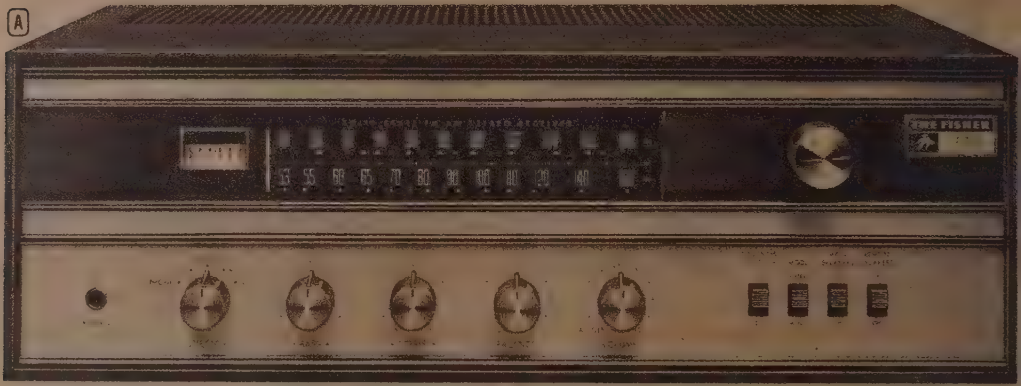
**See page 438 for full Credit details . . Buy with no money down*

Fisher 65-watt Stereo FM-AM Receiver with FET's and integrated circuits for great hi-fi

249^{95} less case

$13 monthly
see page 438

A

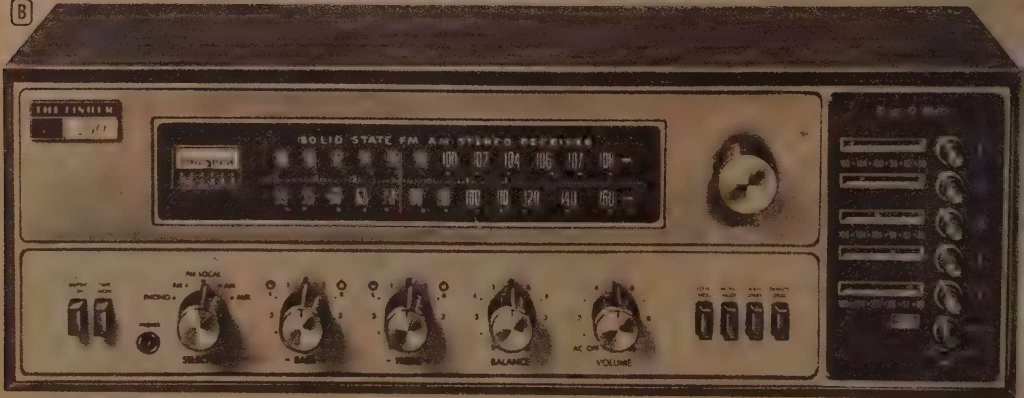

THE FISHER
53 55 60 65 70 80 90 100 110 120 140

Fisher 100-watt Stereo FM-AM Receiver with Tune-O-Matic pushbuttons plus FET's and integrated circuits

299^{95} less case

$15 monthly
see page 438

B


THE FISHER
SOLID STATE FM AM STEREO RECEIVER
100 102 104 106 107 108
100 110 120 140 160
AM LOCAL
PHONO
SELECTOR
BASS
TREBLE
BALANCE
AC OFF
VOLUME

Fisher 65-watt Stereo FM-AM Receiver with silicon-transistor output

Field-effect-transistors in front-end plus integrated circuits in IF stages bring in superb stereo FM . . dual detector for wide-response AM, too

odel 175-T. This stylish receiver delivers thrilling stereo ; a buget price. Pulls in static-free stereo FM and wide-and AM. Field-effect-transistors bring in weak stations, revent crosstalk on strong stations. Integrated circuits ;t new standards in overall performance and reliability. ignal-strength tuning meter. "Stereo Beacon" shows hen you are tuned to a stereo FM station and automati-ally switches circuit to stereo. Dual-detector design for iperior AM reception. Transformerless output is protect-l by Fisher's Transist-O-Gard® circuit. Power band-idth is 25-25,000 Hz at 8 ohms.

ontrols include bass, treble, balance, volume, selector for 'hono, FM, FM Local, AM and Aux. Also has loudness ontour, tape recording inputs and outputs, switches for iain and remote speakers, stereo headphone jack and uilt-in AM antenna. Takes optional walnut vinyl-covered 'ood case below. Size, 4⅝x15½x12¾". For 117 V, 50-60 Iz AC. Shpg. wt., 18 lbs.

3 A 2539 U. 249.95
3 A 2538 U. Walnut Vinyl Wood Case. Wt., 8 lbs..........19.95

SPECIFICATIONS

MPLIFIER CIRCUIT. *Output at 8 Ohms:* 65 watts ±1 dB; 6 watts IHF; 20 watts/ch. rms. *Response:* ±2 dB, 20-0,000 Hz. *Harmonic Distortion:* 0.5%. *Hum and Noise:* 5 dB below rated output. *Outputs:* 4-16 ohms, headphones, ecorder. *Input Sensitivity:* Magnetic Phono Low/High, 5 mV/7.5 mV; Aux., 250 mV. **TUNER CIRCUIT.** *FM ection. Sensitivity:* 2.0 µV, IHF. *Harmonic Distortion:* .6%. *Selectivity:* 45 dB. *Separation:* 35 dB. *Signal-to-Voise:* 65 dB. *Capture Ratio:* 2.8 dB. *AM Section. Sensi-ivity:* 10 µV. *Selectivity:* 50 dB.

Fisher 100-watt Stereo FM-AM Receiver with easy pushbutton FM tuning

Tune-O-Matic® FM pushbutton tuning for instant selection of any of five preset FM stations . . regular slide-rule manual FM-AM tuning, also

Model 250-T. Superb Fisher receiver features outstanding tereo and mono FM, wide-band AM, and Tune-O-Matic®. Two field-effect-transistors in the front-end and two in-egrated circuits in the IF strip assure superior sensitivity nd selectivity on FM. Also has tuning meter, between-tation silencing and "Stereo Beacon". Automatic stereo/mono FM switching. Superior dual-detector AM circuit. 100-watt stereo amplifier packs plenty of punch to drive several pairs of speakers. Silicon-transistor transformerless output protected by Transit-O-Gard®.

Deluxe preamp has controls, inputs and outputs for every music source. Has direct tape monitor, loudness contour, speaker switches for main and remote speakers, selector switch for Phono, FM, FM Local, AM and Aux. Has bass, treble and balance controls. Stereo headphone jack. Takes optional walnut vinyl wood case below. Size, 4⅝x12¾x15⅝". For 117 V, 50-60 Hz AC. Shpg. wt., 19 lbs.

13 A 2544 U. 299.95
13 A 2538 U. Walnut Vinyl Wood Case. Wt., 8 lbs.....19.95

SPECIFICATIONS

AMPLIFIER CIRCUIT. *Output at 8 Ohms:* 100 watts ±1 dB; 80 watts IHF, 30 watts/ch. rms. *Response:* ±2 dB, 20-20,000 Hz. *Bandwidth:* 15-25,000 Hz at 8 ohms. *Harmonic Distortion:* 0.5%. *Hum and Noise:* 90 dB below rated output. *Inputs:* Hi-Lo Phono, Aux., Monitor. *Outputs:* 4-16 ohms, headphones, recorder. *Damping Factor:* exceeds 10. **TUNER CIRCUIT.** *FM Section. Sensitivity:* 2.0 µV IHF. *Harmonic Distortion:* 0.5%. *Selectivity:* 45 dB. *Separation:* 38 dB. *Signal-to-Noise Ratio:* 65 dB at 100% modulation. *Capture Ratio:* 2.8 dB. *AM Section: Sensitivity:* 10 µV.

Fisher 40-watt solid-state FM-AM-Phono Stereo Compact

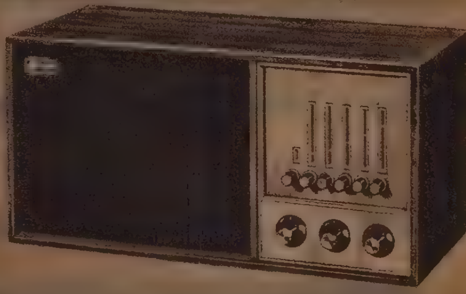
329^{95}

Field-effect-transistors and silicon-transistor output assure outstanding stereo

Model 125. This deluxe Stereo Compact offers exciting stereo FM, wideband AM, 40 watts of power for wide-range sound and complete control facilities. All in an attractive walnut-finished ensemble that will grace anyone's bookshelf. FM circuit boasts field-effect-transistors and integrated circuits for superb stereo reception. "Stereo Beacon," signal-strength indicator. AM has AGC, plus dual detector for wider response.

Preamp has balance, ganged bass and treble tone controls, loudness contour and tape facilities. Main and remote speaker switches and stereo headphone jack. Four-speed automatic turntable has automatic system shutoff and Pickering magnetic cartridge. XP-55B 2-way walnut speaker systems have 8" woofer and 3" tweeter. Control center, 8¼x17½x15⅝". Speakers, 10x29x9". Optional dust cover below. For 117 VAC.

13 A 0485 L3U. Shpg. wt., 76 lbs..............................329.95
13 A 2659 X. Dust Cover. Shpg. wt., 5 lbs...............14.95



High-fidelity FM Table Radio by Fisher in compact walnut finish cabinet

99^{95}

Tune-O-Matic pushbutton FM tuning, separate bass and treble controls, built-in 5¼" speaker

Model 100. High-fidelity monophonic radio provides wide-response hi-fi sound from its built-in 5¼" speaker with 2-lb. magnet structure. Tune-O-Matic FM pushbutton tuning lets you select any one of five favorite preset FM stations at the push of a button—or tune manually as you wish. Baxandall bass and treble tone controls provide tone compensation without distortion. AFC. Walnut cabinet, 6⅝x13½x6¾". For 117 V, 50-60 Hz AC. Shpg. wt., 14 lbs.

13 A 2663 X. 99.95
13 A 2664 X. S-30 Speaker System. Extension speaker. 6½x13⅜x6¾". Shpg. wt., 9 lbs.......................29.95

Buy Fisher hi-fi today on Allied's convenient Credit Fund Plan

RECEIVERS

FISHER
UNIVERSITY

Fisher 150-watt Stereo FM-AM Receiver with Tune-O-Matic pushbuttons for fast selection of any five FM stations

349^{95} less case
$17 monthly*

A

THE FISHER
200
SOLID STATE FM-AM STEREO RECEIVER
Tune O Matic
1
2
3
4
5

Fisher's finest Stereo FM-AM Receiver has 190-watt power plus Autoscan for easiest FM tuning ever . . tunes electronically

449^{95} less case
$20 monthly*

B

THE FISHER
Tune O Matic
500

*See page 438 for full Credit details

(A) Fisher 150-watt Stereo FM-AM Receiver brings new convenience to hi-fi listening

Tune-O-Matic FM pushbutton tuning, field effect-transistor front-end, plus integrated circuit IF and other advanced features

Model 400-T. Magnificent Fisher solid-state receiver features plenty of power to drive several sets of speakers, outstanding stereo FM, plus the convenience and accuracy of Tune-O-Matic FM pushbutton tuning. Excellent AM, too. Sensitive FM circuit has field-effect-transistors in the RF stage and integrated circuits in the IF strip for pulling in even weak stations with full fidelity. Also has precision d'Arsonval tuning meter, ultra-smooth flywheel tuning, between-station quieting on FM, automatic stereo/mono FM switching and Fisher's famous "Stereo Beacon" indicator light.

Deluxe preamp has direct tape monitor, loudness contour, Baxandall-type bass and treble tone controls, main and remote pushbutton speaker switches, and stereo headphone jack. Silicon-transistor output is protected against shorts and overloads by patented Transist-O-Gard® overload protection circuit. Takes optional vinyl-covered walnut wood case below. Size, 4⅝x15½x14¼" deep. For 105-128 volts, 50-60 Hz AC.

13 A 1626 U. Shpg. wt., 25 lbs. 349.95

13 A 2041 X. Walnut Wood Case. Shpg. wt., 9 lbs. 22.95

SPECIFICATIONS

AMPLIFIER CIRCUIT. *Output at 8 Ohms:* 150 watts ±1 dB, 120 watts IHF. 50 watts rms/ch. *Response:* ±2 dB, 20-25,000 Hz. *Power Bandwidth:* 10-30,000 Hz. *Harmonic Distortion:* 0.5%. *Hum and Noise:* better than 90 dB down. *Inputs:* Hi-Lo Phono, Aux., Monitor. *Outputs:* 4-16 ohms, stereo headphones, tape recording. **FM CIRCUIT.** *Sensitivity:* 2.0 μV IHF. *Harmonic Distortion at 1 kHz:* 0.5%. *Selectivity:* alternate channel, 45 dB. *Stereo FM Separation:* 38 dB at 1000 Hz. *Signal-to-Noise Ratio:* 65 dB at 100% modulation. *Capture Ratio:* 2.8 dB.

(B) Fisher's finest Stereo FM-AM Receiver has everything for the connoisseur

AutoScan electronically sweeps the dial and converts the signal-strength meter to a frequency indicator for the most accurate FM tuning yet devised

Model 500-TX. The supreme achievement of famous Fisher engineering! Mighty 190-watt stereo receiver features three methods of FM tuning—AutoScan, Tune-O-Matic® and smooth flywheel tuning. Dual-gate MOSFETs (metal-oxide-silicon-field-effect-transistors) plus crystal IF filter assure amazing sensitivity and selectivity for truly remarkable stereo FM reception. Also has precision d'Arsonval tuning meter, between-station quieting, AFC, "Stereo Beacon" and automatic stereo/mono FM switching. AM circuit has advanced 4-resonator ceramic ladder filter.

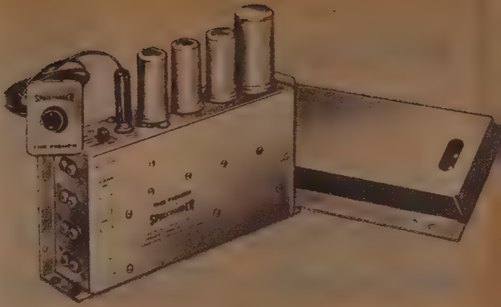
Versatile preamp has direct tape monitor, 5-position speaker switch, stereo headphone jack, Baxandall-type bass and treble tone controls, high and low filters, and loudness contour. Silicon-transistor outut is protected by Fisher's Transist-O-Gard®. Takes optional case below. Size, 5⅛x16⅞x14½". For 105-128 V, 50-60 Hz AC.

13 A 2627 U. Shpg. wt., 30 lbs. 449.95

13 A 2042 X. Walnut Vinyl Wood Case. Shpg. wt., 9 lbs. 22.95

SPECIFICATIONS

AMPLIFIER CIRCUIT. *Output at 8 Ohms:* 190 watts ±1 dB, 150 watts IHF. 65 watts rms/ch. *Response:* ±1.5 dB, 15-25,000 Hz. *Power Bandwidth:* 8-35,000 Hz at 8 ohms. *Harmonic Distortion:* 0.4% at full power output. *Hum and Noise:* 90 dB below full rated output. **FM CIRCUIT.** *Sensitivity:* 1.7 μV IHF. *Harmonic Distortion:* 0.4%. *Signal-to-Noise Ratio:* 65 dB at 100% modulation. *Selectivity:* alternate channel, 70 dB. *Capture Ratio:* 1.5 dB. *Stereo FM Separation:* 38 dB at 1000 Hz. **AM TUNER.** *Sensitivity:* 10 μV. *Selectivity:* 80 dB.



Fisher Reverberation System for the vibrant excitement of the concert hall

69^{95}

Works through tape monitor or separate preamp to create the acoustics of the concert hall

Model K-10. Add the vibrant, exciting sound of a live performance to your hi-fi system with the Fisher reverberation system. By delaying part of the audio signal for 33 milliseconds, the K-10 creates the reverberation effect of the concert hall or auditorium. This important effect adds greater realism to musical playback in stereo or mono. Works with most Fisher receivers including earlier models 400, 500 and 800. (Not recommended for Fisher 160-T or 175-T.) Also for systems with tape monitor or separate preamplifier. Easy to operate—has only one control. Three-tube circuit with selenium rectifier. Size, 7x9½x2". For 105-120 volts, 50-60 Hz AC.

13 A 2097 X. Shpg. wt., 10 lbs. 69.95

University 120-watt Stereo FM Receiver features integrated circuit IF strip

379^{50} less end-panels

Pick up stations you never heard before with MOSFET front-end

Studio Pro 120-A. This receiver features the latest MOSFETs in front-end. MOSFETs set new standards for stereo FM reception because they are more stable than FET's, and reduce drift, noise and distortion to never-before-possible levels. Also has automatic stereo/mono FM logic switching circuit, stereo indicator light, between-station quieting and center-channel tuning meter. Integrated-circuit IF strip boasts razor-sharp 55 dB selectivity and astonishing capture ratio under 1 dB.

Silicon-transistor stereo amplifier has 120 watts of IHF power to drive several sets of speakers. Versatile preamp has tape monitor, center-channel output, high and low filters, speaker and mode switches, loudness contour and stereo headphone jack. Response: +0, −3 dB, 20-100,000 Hz. FM Sensitivity: 2.3 μV. 4½x16x12". End panels below. For 110-120 V, 60 Hz AC.

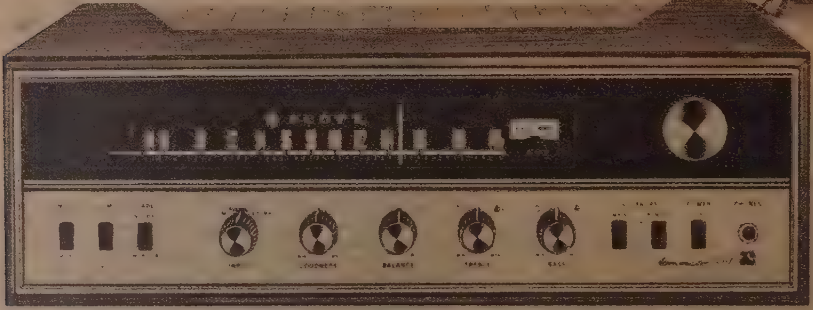
13 A 2770 U. Shpg. wt., 18 lbs. 379.50

13 A 2771 X. Walnut End Panels. Wt., 6 lbs. . . Pair. 9.95

RECEIVERS

H. H. SCOTT

Scott's lowest priced Stereo FM Receiver . . 70-watt output



A

FET front-end and integrated circuit IF strip assure sensitive, static-free FM reception

199.95 less case

$10 monthly
see page 438

Scott 110-watt Stereo FM-AM Receiver with quartz crystal filter in IF strip . . never needs realignment

B

Wire-wrap bonded connections plus plug-in PC modules assure longer life, easier servicing

299.95 less case

$15 monthly
see page 438

Scott 175-watt Stereo FM-AM Receiver has quartz crystal filter and rugged silicon output transistors

C

Microphone input jacks conveniently mounted on front panel let you make your own music!

349.95 less case

$17 monthly
see page 438

SHIPPING NOTE: Items with suffix U, W or Z in stock no. sent truck or express. See Ordering Information pages.

70-watt solid-state FM Receiver has ield-effect-transistors for superior FM

el 341X. Even Scott's lowest priced solid-state stereo receiver offers many convenient features, plus the tive field-effect-transistor front-end found in Scott's er priced models. FETs assure greater sensitivity, lom from cross-modulation and lower noise than con- ional bipolar transistors. You will hear more stations clearly with FET design. Also has tuning meter, o indicator light and flywheel weighted knob to simpli- curate, pinpoint tuning. Integrated circuits in IF strip e great stereo FM.

venient, positive-acting slide-type switches control main and remote speaker systems; also control monitor for use with three-head tape decks and loud- contour which automatically compensates for loss of an hearing sensitivity to bass and treble at low volume. mp has volume, balance, bass and treble tone controls. t panel stereo headphone jack lets you enjoy hi-fi in plete privacy. Rugged transformerless output stage res full power over the entire audio frequency spectrum.

er Output at 4 ohms: 70 watts ±1 dB, 55 watts IHF; atts rms per channel at 8 ohms. Response: ±1 dB, 20- 00 Hz. Hum and Noise: –55 dB. Harmonic Distortion: at rated output. Sensitivity: 2.5 μV. Separation: 30 Inputs: mag. phono, tape, aux. Outputs: 4-16 ohms, and headphones. Size, 4⅛x14¾x12½". Takes optional below. For 117 VAC.

2774 U. Shpg. wt., 17 lbs. **199.95**
2040 X. Walnut Wood Case. Wt., 4 lbs. **22.50**

110-watt solid-state FM-AM Receiver rugged silicon-transistor output stage

el 382C. This Scott receiver has many extras to assure rb stereo. Field-effect-transistors in the front end, tz crystal lattice filter in the IF and integrated circuit strip and multiplex provide sensitive, noise-free FM superior stereo separation. Tuning meter, flywheel ng, stereo indicator light and Perfectune light that es on when FM is tuned in perfectly. Between- ion quieting eliminates interstation "hash" when re tuning FM stations.

nputer-type pushbuttons control loudness compensa- scratch filter, tape monitor, mono/stereo mode, ing, main and remote speaker systems. Also has vol- balance, ganged bass and treble controls. Plug-in ker connectors prevent accidental short circuits. er Output at 4 ohms: 110 watts ±1 dB, 90 watts IHF; watts rms per channel at 8 ohms. Response: ±1 dB, 0,000 Hz. Sensitivity: 2.5 μV. Separation: 40 dB. es optional case below. 5x15x14". 117 VAC.

2772 U. Shpg. wt., 19 lbs. **299.95**
2184 X. Walnut Wood Case. Wt., 4 lbs. **22.50**

175-watt solid-state FM-AM Receiver sily drives two sets of speaker systems

el 386. Powerful receiver offers superb mono and stereo ultra-versatile preamp facilities for every music ce and enough power to drive any speaker systems e. Field-effect-transistor front-end and integrated uit IF and multiplex assure finest stereo FM reception. stal filter in the IF strip provide outstanding selectivity hat you'll hear more stations than ever before. Tuning er, stereo indicator light and flywheel tuning make ion selection easy. Between-station quieting eliminates e when you tune FM.

nputer-type pushbuttons control loudness contour, tape nitor, scratch filter, muting, mono/stereo mode, main remote speakers. Also has bass, treble, volume, stereo dphone jack and front panel microphone inputs. Power tput at 4 ohms: 175 watts ±1 dB, 137 watts IHF; 36 per channel at 8 ohms. Response: ±1 dB, 9-22,000 Sensitivity: 1.9 μV. Takes optional case below. Size, x15¾x14". For 117 VAC.

A 2773 U. Shpg. wt., 22 lbs. **349.95**
A 2733 X. Walnut Wood Case. Wt., 6 lbs. **26.95**

Scott 12 VDC/110 VAC Receiver with speakers

199^{95}

$10 monthly*

Field-effect-transistors in the front end assure better FM reception

Model 2550. Stereo FM-AM receiver system operates on 12 VDC in cars or boats or from AC line. Offers features comparable to many more expensive component systems. Automatic stereo switching. Separate tone controls for each channel. Sensitive FET front-end. Integrated circuit preamp and IF strip. "Full Complementary Output" delivers virtually undistorted sound even at the lowest listening levels. Walnut finish wood.

Includes inputs for tape recorder and magnetic phono. Front panel stereo headphone jack. Complete tape monitoring facilities. Acoustic suspension speaker systems. FM Sensitivity, 2.5 μV. Receiver, 5½x13⅝x7¼". Speakers, 7½x13⅝x6¾". For 12 VDC/110 VAC.

13 A 2678 X. Shpg. wt., 30 lbs. **199.95**

Advanced Scott 110-watt Stereo FM Receiver

269^{95} **less case**

$14 monthly*

Silicon output transistors assure highly reliable operation and cleaner sound

Model 342C. Outstanding stereo FM receiver features plug-in PC modules and wire-wrap permanent bonded connections for reliability that meets military standards. Crystal filter in IF, field-effect-transistor front-end and integrated circuits in the IF and multiplex sections assure superb mono and stereo FM. Has tuning meter, stereo indicator light, Perfectune®, muting, tape monitor, loudness contour, main and remote speaker switches. Stereo headphone jack. Power Output at 4 ohms: 110 watts ±1 dB, 90 watts IHF; 30 watts rms per channel at 8 ohms. Response: ±1 dB, 20-20,000 Hz. Sensitivity: 1.9 μV. Takes optional case below. Size, 5x15x12". For 117 VAC.

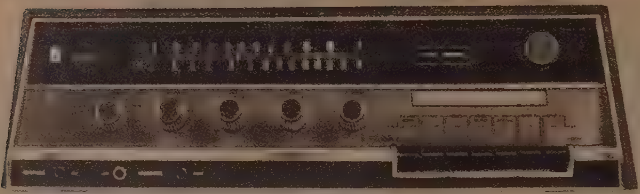
13 A 2025 U. Shpg. wt., 17 lbs. **269.95**
13 A 2184 X. Walnut Wood Case. Wt., 4 lbs. **22.50**

RECEIVERS

H. H. SCOTT

210-watt Stereo FM-AM Receiver

399^95^ $18 monthly
see page 438



Model 3800. Exciting Scott stereo F
AM receiver has the latest design feat
for superlative performance. Sensi
silver-plated FET front-end pulls in m
stations. Integrated-circuit IF strip
preamp virtually eliminates distort
All silicon output transistors. Delive
tremendous 210-watt output, ±1 dE
4 ohms; 170-watt IHF at 4 ohms;
watts/channel rms.

Back-lit slide-rule tuning dial, st
light, "Perfectune" indicator and tu
meter assure precise station select
Crystal filter for top selectivity. Dual
and treble controls; balance, loud
controls. Inputs for tape, phono,
Tape monitor. Outputs: stereo headph
jack, tape, 4-16 ohm speakers.

Response: ±1 dB, 9-22,000 Hz. FM S
sitivity: 1.9 μV IHF. FM Stereo Sep
tion: 40 dB. Signal-to-Noise Ratio:
dB. Capture Ratio: 2.5 dB. Size, 5
$18\frac{1}{4}$x$14\frac{1}{2}$". With handsome oiled wal
wood case. For 117 VAC.
13 A 2461 U. Shpg. wt., 28½ lbs. . .**39**

Scott professional quality Stereo FM-AM Receiver

699^95^ less case
$29 monthly
see page 438

55
65
75
80
90
100
110
120
130
140
150
160

Model 3900. Finest Scott stereo FM-
receiver ever! Built to give you st
realism that rivals the depth and splen
of the original performance. Magnific
solid-state circuit pours out a full 85 w
continuous (rms) power per channel
ohms.

Has IC's in IF strip, preamp and mu
plex circuits. Silver-plated FET fr
end for super sensitivity. Dual cry
filters give razor sharp selectivity. Inp
for tape, phono, aux. Outputs for
ohm speakers, recording, stereo he
phone. Tape monitor. Full contr
stereo light, "Perfectune," and meter.

Response: ±1 dB, 20-30,000 Hz.
Sensitivity: 1.7 μV. FM Stereo Sep
tion: 40 dB. Signal-to-Noise Ratio: 65
Capture Ratio: 2.5 dB. $4\frac{15}{16}$x$15\frac{9}{16}$x12
Optional case below. For 117 VAC.
13 A 2464 U. Shpg. wt., 35 lbs. **69**

Deluxe Walnut Wood Case.
13 A 2733 X. Shpg. wt., 6 lbs. **2**

Exciting Scott "Casseiver" combines 82-watt solid-stat
Stereo FM Receiver with Stereo Cassette Recorder

369^95^ $17 monthly
see page 438

Easy-to-use Cassettes

Records or plays up to two hours of stereo on cassettes

Model 3600. The latest concept in home entertainment! Scott combines a deluxe solid-state stereo FM-AM receiver with a versatile stereo tape cassette recorder in an attractive low-profile wood cabinet with a smart walnut finish. Full-feature receiver boasts sensitive silver-plated FET front-end and IC's in the IF strip for top performance. Pulls-in marvelous true-to-life stereo FM, crystal-clear mono FM. Power Output at 4 ohms: 82 watts, ±1 dB; 65 watts IHF; 22 watts rms per channel. Has a full array of
controls and inputs for all music sources. Stereo cassette
corder can tape directly off-the-air, or live with mikes.
tures synchronous motor, level meters, digital coun
pushbutton controls. Plays back through Casseiver for
fidelity sound. Response: ±1 dB, 20-20,000 Hz. FM Se
tivity: 2.5 μV. FM Separation: 30 dB. Signal-to-N
Ratio: 60 dB. With walnut end panels. Size, $22\frac{1}{2}$x$11\frac{3}{4}$x4
For 117 VAC.
13 A 2036 U. Shpg. wt., 24 lbs. **36**

90-watt Stereo FM-AM Receiver

239^{95}

$12 monthly*

el KR-77. This solid-state receiver by wood is a fine "starter" component your home stereo system. Just add kers and a turntable to enjoy beauti- stereo music from FM or records; ives crystal-clear AM too.

er sensitive front-end features two -effect-transistors and 4-gang tuning lenser to pull in the weakest FM sta- s with ease. IF strip has two inte- ed circuits for superior selectivity. has muting on FM, stereo indicator and precision tuning meter.

e monitor, front-panel tape dubbing, ker selector, headphone jack, loud- contour, rumble and scratch filters, mp and main amplifier outputs. rload circuit protects output stage. er output at 4 ohms: 90 watts ±1 dB; vatts IHF; 33 watts rms per channel. 5 dB, 15-50,000 Hz. Sensitivity: 1.9 Walnut-finish metal case, 5½x16½x ". 117 VAC. Japan.
2087 U. Shpg. wt., 29 lbs.....239.95

el KR-70. As above, but FM only.
2088 U.....................199.95

Solid-state Stereo FM-AM Receiver packs 170 watts

299^{95}

$15 monthly*

el KR-100. Here's a powerful stereo -AM receiver with all the controls and sensitivity you need for magnificent eo. FM front end has two field-effect- sistors and four-gang tuning condenser outstanding stereo reception. The IF uit has four integrated circuits for rior selectivity and low 2.5 dB capture . Also has between-station quieting M, stereo indicator light and tuning er.

tape monitor, front-panel tape dub- , center channel and preamp outputs, ker selector, stereo headphone jack, tch and rumble filters, mode switch, loudness contour. Overload circuit ects output stage. Power output at 4 s: 170 watts ±1 dB;; 140 watts IHF; vatts rms per channel. ±1.5 dB, 13- 00 Hz. Sensitivity: 1.8 µV. FM sepa- on: 35 dB. Walnut-finish metal case, 16½x12¼". 117 VAC. Japan.
2492 U. Shpg. wt., 26 lbs.....299.95

-watt Stereo M-AM Receiver

179^{95}

$9 monthly*

lel KR-44. Big value in solid-state stereo receiver that many of the features of more expensive Kenwoods. sitive FM circuit has two FETs and two ICs for excel- stereo FM; clear AM. Tuning meter, stereo indicator t. Tape monitor, front-panel tape dubbing, low level ter channel output, speaker switch, headphone jack, lness contour, noise filter. Power output at 4 ohms: 60 ts ±1 dB; 48 watts IHF; 20 watts rms per channel. dB, 20-50,000 Hz. Sensitivity: 2.2 µV. Walnut-finish al case, 5½x16½x15½". 117 VAC. Japan.
2089 U. Shpg. wt., 27 lbs.....................179.95

Kenwood's finest . . 250-watt FM-AM

349^{95}

$17 monthly*

Model TK-140X. Kenwood's best receiver features ultra-sensitive field-effect-transistor front-end with integrated circuits in the IF stages for superlative stereo FM. Wide-band AM, too. Stereo indicator light, tuning meter, between-station quieting on FM. Preamp has tape monitor, mode switch, speaker selector, headphone jack, loudness contour, rumble and scratch filters. Power output at 4 ohms: 250 watts ±1 dB; 200 watts IHF; 80 watts rms per channel. ±1.5 dB, 8-120,000 Hz. Sensitivity: 1.7 µV. Walnut-finish metal case, 5½x16½x12¼". 117 VAC. Japan.
13 A 2490 U. Shpg. wt., 33 lbs.....................349.95

Sansui 125-watt Stereo FM-AM Receiver with "black-out" dial

299^{9}
$15 monthl

Model 2000. Premium-quality receiver features silicon transistors for purest sounding stereo hi-fi. Field-effect-transistors in the front-end and automatic stereo/mono FM switching assure superb mono and stereo FM reception; excellent AM too. Tuning meter; stereo indicator light; illuminated program function indicators. Stereo headphone jack, speaker system selector switch, rumble and scratch filters, loudness contour, between-station quieting on FM, tape monitor. Two-tone black and brushed silver-gold panel; metal case. 117 VAC. $4\frac{15}{16}$x$16\frac{1}{3}$x$13\frac{1}{4}$". Japan.

13 A 2075 U. Shpg. wt., $26\frac{1}{2}$ lbs. 299.95
13 A 2098 X. Walnut Wood Case. Shpg. wt., 7 lbs. 22.50

SPECIFICATIONS

AMPLIFIER CIRCUIT: *Power Output at 4 Ohms:* 125 watts ±1 dB, 100 watts IHF; 36 watts rms per channel at 4 ohms. *Response:* ±1.5 dB, 15-40,000 Hz. *Power Bandwidth:* 20-40,000 Hz. *Harmonic Distortion:* less than 0.8% at rated output. *Hum and Noise:* better than −70 dB. *Inputs:* magnetic phono, tape and auxiliary. *Outputs:* 4-16 ohms, tape, headphones and tape monitor.

TUNER CIRCUIT: FM. *Sensitivity:* 1.8 μV IHF. *Harmonic Distortion:* less than 0.8%. *Separation:* 35 dB. *Signal-to-Noise Ratio:* 65 dB. *Selectivity:* 50 dB at 98 MHz. *Capture Ratio:* 2.5 dB. *Image Rejection:* 80 dB. **AM Section:** *Sensitivity:* 15 μV.

Sansui 90-watt Stereo FM-AM Receiver

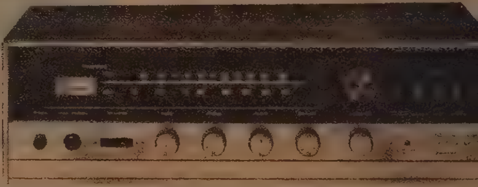
249^{95}
$13 monthly*

Model 800. Silicon-transistors; field-effect-transistors in FM front-end. Tuning meter, stereo light, headphone jack, speaker selector, FM interstation muting, tape monitor. Power Output at 4 Ohms: 90 watts ±1 dB, 70 watts IHF; 28 watts rms per channel. Response: ±1 dB, 15-50,000 Hz. Sensitivity: 2.8 μV. Metal case. $4\frac{1}{2}$x$15\frac{13}{16}$x$13\frac{1}{8}$". For 117 VAC. From Japan.

13 A 2077 U. Shpg. wt., 23 lbs. 249.95
13 A 2080 X. Walnut Wood Case. Shpg. wt., 7 lbs. 22.50

Sansui 60-watt Stereo FM-AM Receiver

199^{95}
$10 monthly



Model 350. Silicon-transistors; field-effect-transistors front end for superior FM. Tuning meter, stereo indicat light, headphone jack, speaker selector, tape monit loudness contour. Power Output at 4 ohms: 60 wat ±1 dB, 46 watts IHF; 16 watts rms per channel. Respons ±1 dB, 20-30,000 Hz. Sensitivity: 3 μV. Metal case. 4 $15\frac{13}{16}$x$13\frac{1}{8}$". 117 VAC. Japan.

13 A 2096 U. Shpg. wt., 20 lbs. . . . . 199.
13 A 2095 X. Walnut Wood Case. Shpg. wt., 7 lbs. . . . . 19.

Marantz 80-watt-rms Stereo FM Receiver with oscilloscope tuning

695^{00} less case
$29 monthly*

Model 18. A landmark in receiver desig Passive RF stage has only pure tuning se tions; there are no tubes, transistors or FE to overload. Modified Butterworth cryst filters couple the four IF stages for phenomen limiting and stereo FM separation. Oscillosco tuning assures station selection with u paralleled precision.

Has stereo indicator light, "gyro-touch" tuni flywheel, tape monitor, front-panel ta dubbing and stereo headphone jacks, mutin speaker selector, scratch and rumble filte Power: 40 watts rms per channel. Respons ±0.5 dB, 20-20,000 Hz. Distortion: 0.2 Sensitivity: 2.8 μV. Signal-to-Noise Ratio: dB. Separation: 45 dB. Size, 6x$18\frac{1}{4}$x1 Takes optional case below. For 117 VAC.

13 A 2260 U. Shpg. wt., 46 lbs. . . . . 695.
13 A 2261 X. Walnut Case. 11 lbs. . . . . 39.

idland's best Stereo FM-AM eceiver packs mighty 150 watts

299^{95}
$15 monthly*

SPECIFICATIONS

AMPLIFIER CIRCUIT: *Power Output at 4 Ohms:* 150 watts ±1 dB; 120 watts IHF; 40 watts/ch. rms. *Response:* ±1.5 dB, 25-30,000 Hz. *Harmonic Distortion:* 0.2% at rated output. *Hum and Noise:* −55 dB below rated output. *Inputs:* magnetic phono, tape head and auxiliary. *Outputs:* 4-16 ohms, stereo headphones, tape and tape monitor.

TUNER CIRCUIT: FM Section. *Usable Sensitivity:* 1.5 μV. *Harmonic Distortion:* 0.3% at 100% modulation. *Signal-to-Noise Ratio:* 60 dB at 100% modulation. *Separation:* 35 dB at 400 Hz. *Image Rejection:* 60 dB at 98 MHz. **AM Section.** *Sensitivity:* 300 μV per meter.

Model 19-560. Midland's most powerful solid-state receiver features field-effect-transistors in the front-end and four integrated circuits in the IF strip for superb reception of even distant FM stations; excellent AM too. Color-coded indicator lights show choice of program source when receiver is in operation. Automatic stereo/mono FM switching, stereo indicator light, signal strength and "0 center" meters simplify tuning. Also has between-station quieting on FM, main and remote speaker system switches, tape monitor, scratch filter, loudness contour and stereo headphone jack. Extruded aluminum front panel with walnut veneer wood case. 5x17½x10". 117 VAC. Japan.
13 A 2050 U. Shpg. wt., 27½ lbs. 299.95

Midland 75-watt Stereo FM-AM Receiver

199^{95}
$10 monthly*

odel 19-551. Offers field-effect-transistor front end for eater FM sensitivity; plus fine AM. Program indicator ghts. Stereo indicator light, tuning meter, AFC, scratch ter. loudness contour and headphone jack. Power Out-ut at 4 ohms: 75 watts ±1 dB, 60 watts IHF; 20 watts/ı. rms. Response: ±1.5 dB, 15-30,000 Hz. FM Sentivity: 2 μV. Aluminum front panel. With walnut wood ıse. Size, 4¾x16⅜x9½". For 117 VAC. Japan.
3 A 2052 U. Shpg. wt., 24½ lbs. 199.95

Midland 100-watt Stereo FM-AM Receiver

249^{95}
$13 monthly*

Model 19-555. Features field-effect-transistor front end for noise-free FM; clear AM too. Program indicator lights. Stereo indicator light, tuning meter, between-station quieting on FM, speaker switches, and tape monitor. Power Output at 4 ohms: 100 watts ±1 dB; 80 watts IHF; 30 watts/ch. rms. Response: ±1.5 dB, 25-30,000 Hz. FM Sensitivity: 1.8 μV IHF. Size, 5x17¾x9" deep. For 117 VAC. Japan.
13 A 2054 U. Shpg. wt., 24¾ lbs. 249.95

Bogen 55-watt Stereo FM-AM Receiver has electronic tuning

249^{95}
$13 monthly*

lodel DB240. Advanced receiver features push-utton or manual electronic tuning. Field-effect-ransistor front-end and ceramic filter in the ıtegrated circuit IF strip for noise-free FM eception; offers clear AM too. Slide-type treble, ass, volume and balance controls.

ushbuttons control AC power, main and remote peaker systems, scratch filter, AFC, mode, oudness contour, auxiliary, phono, and FM or ıM. Also has stereo headphone jack. Optional emote control listed below.

utput at 8 ohms: 55 watts ±1 dB, 45 watts HF, 18 watts rms per channel. Response: ±2 lB, 20-20,000 Hz. Harmonic Distortion: less han 0.7% at rated output. FM Sensitivity: 1.5 ıV IHF. With walnut veneer end panels, metal ase. 4¼x16½x11½". 117 VAC.
3 A 2058 U. Shpg. wt., 18 lbs. 249.95
3 A 2101 X. Remote Control. 1 lb. 39.95

**See page 438 for full Credit details*

RECEIVERS

HARMAN-KARDON
SHERWOOD

Harman-Kardon 90-watt Stereo FM-AM Receiver

199^{95} metal case

$10 monthly*

Shown in wood case

Model 330. Solid-state receiver featur
ultra-wide response, important contr
features and decorator-designed styling
a low price. Advanced metal oxide silico
field-effect-transistor (MOSFET) fron
end assures high signal-to-noise ratio an
superior sensitivity for static-free recep
tion of even distant FM stations. Also ha
automatic stereo/mono FM switchin
and stereo indicator light to indica
stereo FM reception. Flywheel tuning an
signal-strength meter simplify tuning.

Rocker switches for AC power, main an
remote speaker systems, mode, ta
monitor and loudness contour. Illum
nated program indicators for AM, FM
Stereo FM, Phono, Aux. Stereo hea
phone jack. Output at 4 ohms: 90 wat
±1 dB, 70 watts IHF; 20 watts rms p
channel. Response: ±1.5 dB, 7-50,000 H
Sensitivity: 2.7 μV. Harmonic Distortio
less than 0.8%. 4¼x15⅜x13″. Wit
metal case; takes optional case below. 11
VAC. Japan. Wt., 20 lbs.

13 A 2064 U. ....199.
13 A 2069 X. Walnut Case. 6 lbs. . . . .21.

Harman-Kardon 140-watt Stereo FM Receiver

299^{95} metal case

$15 monthly*

Model 820. Harman-Kardon's finest! Fe
tures metal-oxide-silicon-field-effect-tra
sistors (MOSFETs) in front end, int
grated circuits and crystal filter in the I
strip for superb mono and stereo FM r
ception. Between-station quieting on F
suppresses annoying hash between st
tions. Tuning meter, flywheel tunin
automatic stereo/mono FM switchin
and stereo indicator light. Lighted i
dicators for program source.

Front panel has tape monitor, stere
headphone jack, loudness contour, scrat
filter and main/remote speaker switche
Ebony dial with gold front panel. Outp
at 4 ohms: 140 watts ±1 dB; 110 wat
IHF; 40 watts rms per channel. Respons
±1 dB, 5-60,000 Hz. Distortion: less tha
0.5%. Sensitivity: 1.8 μV. With met
case. Optional walnut case below. 4¼
16½x12″. 117 VAC. Japan.

13 A 2288 U. Shpg. wt., 25 lbs. . . . .299.
13 A 2289 X. Walnut Case. 6 lbs. . . . .25.

Shown in wood case

Sherwood 225-watt Stereo FM-AM Receiver

429^{95} less case

$19 monthly*

Silicon output delivers full 225 watts with wide power bandwidth of 12-30,000 Hz

Model S-7900. Features FET front-end and integrated circuits plus solid-state filter in the IF strip for superior FM; excellent AM too. Also has between-station quieting on FM, tape monitor with front panel tape dubbing jack, stereo headphone jack and monophonic speaker output. Stereo indicator light and "0 center" tuning meter simplify tuning. Power output at 4 ohms: 225 watts ±1 dB, 180 watts IHF; 50 watts rms per channel. Sensitivity: 1.8 μV. Distortion: 0.1% at 10 watts. 117 VAC. Takes optional case below. 5x16½x14″. 28 lbs.

13 A 2031 U. 429.95
13 A 2030 U. S-8900. Above, but no AM. 27 lbs. 399.95
13 A 2007 X. Walnut Grain Metal Case. 8 lbs. 9.00
13 A 2006 X. Walnut Wood Case. Wt., 8 lbs. 28.00

Shown in wood case

Sherwood 125-watt Stereo FM-AM Receiver

329^{95} less case

$16 monthly*

Solid-state filter and integrated circuits in the IF strip for studio-monitor quality stereo FM

Model S-7500. Sensitive field-effect-transistor front-en
Integrated circuits and solid-state filter in the IF strip f
noise-free FM reception. Interstation hush on FM, ta
monitor with front panel tape dubbing jack, headpho
jack, monophonic speaker output and main and remo
speaker pushbuttons. Stereo indicator light and "0 cente
tuning meter make tuning easier. Power Output at 4 ohm
125 watts ±1 dB, 100 watts IHF; 35 watts rms per cha
nel. Sensitivity: 1.8 μV. 117 VAC. Takes optional ca
below. 5x16½x12″. Shpg. wt., 22 lbs.

13 A 2071 U. ....329.
13 A 2073 U. S-8500. Above, but no AM. 22 lbs. . . . .299.
13 A 2046 X. Walnut Grain Metal Case. 7 lbs. . . . . .9.
13 A 2000 X. Walnut Wood Case. Wt., 7 lbs. . . . . .28.

RECEIVERS

ELECTRO-VOICE
EICO

Electro-Voice 130-watt Stereo FM-AM Receiver

239^{40} less case

$12 monthly*

el 1282. Budget-priced receiver has y features usually found only in more nsive models. Field-effect-transistor t-end and integrated circuits in the trip deliver superb stereo FM recep- ; excellent AM too. Has "0 center" ng meter and stereo indicator light implify AM and FM tuning. Illumi- d call outs indicate choice of Auxiliary, no, FM or AM program sources.

ker switches control loudness contour, monitor, main and remote speaker ems. Push-pull mode switch is com- d with balance control. Stereo head- ne jack, bass and treble controls. er output at 4 ohms: 130 watts ±1 105 watts IHF; 40 watts rms per nel. FM Sensitivity: 2.5 μV IHF. x14¾x10¼". Optional case below. 117 VAC. Wt., 19 lbs.

2809 U........................**239.40**
2807 X. Walnut Case. 7 lbs......**19.80**

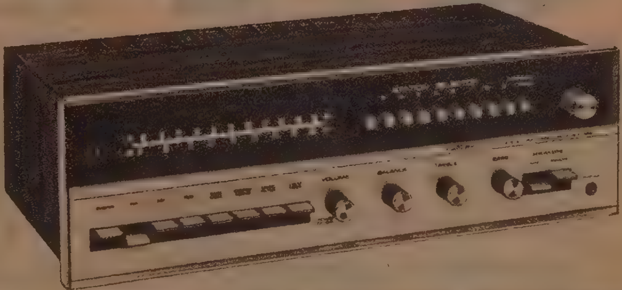
el 1281 Stereo FM Receiver. Above, but AM. Takes case above. Wt., 18 lbs.

2808 U........................**219.60**

Electro-Voice 250-watt Stereo FM-AM Receiver

399^{60} less case

$18 monthly*



el 1482. Finest E-V receiver features ng by means of nine preset pushbut- on blackout dial. Field-effect-tran- r front-end, crystal filters and inte- ed circuit IF strip assure superb FM ption; excellent AM too. Tuning er, stereo indicator light and auto- ic stereo/mono FM switching sim- tuning. Controls include bass, treble, me, balance, tape monitor, loudness pensation, scratch filter. Stereo head- ne jack. "Black-out" dial.

switches for controlling two sets of ker systems. Silicon transistors as- high reliability and finest sound. er output at 4 ohms: 250 watts ±1 200 watts IHF; 50 watts rms per nnel. Response: ±1 dB, 10-40,000 Hz. sitivity: 2 μV. Hum and Noise: −74 Satin gold panel. Takes optional case w. 5x17x13½". 117 VAC.

2292 U. Shpg. wt., 23 lbs.....**399.60**
2293 X. Walnut Case. 9 lbs.....**24.95**

Eico 80-watt FM Receiver

Silicon-transistor circuit for finer sound, longer life

259^{95}

$13 monthly*

del 3570. Famous Eico stereo FM re- ver has silicon transistors for finest reo. Boasts five tuned circuits in front- plus four double-tuned IF stages for ellent sensitivity and selectivity. Trans- merless output assures wide reponse: .5 dB, 8-60,000 Hz. Tuning meter, reo indicator light, AFC, SCA filter, aker selector and stereo headphone k. Power output at 4 ohms: 80 watts dB, 70 watts IHF, 20 watts rms per nnel. Sensitivity: 2.4 μV. With wal- t-grain metal case, 4½x16x9". 115 VAC.

A 2343 U. Shpg. wt., 14 lbs.....**259.95**

SEE PAGES
472-475
FOR
EICO STEREO
COMPONENTS
IN KIT FORM

Eico 80-watt FM-AM Receiver

Superb FM, good AM and full preamp control facilities

279^{95}

$14 monthly*

Model 3770. Eico's best stereo FM-AM receiver. Delivers clean 80-watts power output plus excellent stereo FM and AM. Direct-coupled silicon-transistor circuit boasts wide ±0.5 dB, 8-60,000 Hz response. Preamp has complete control facilities including tape monitor for use with 3-head tape machines. Also has speaker selector and stereo headphone jack. Tuning meter and stereo indicator light. Power: Same as 3570, left. Sensitivity: 2.4 μV. With walnut-grain metal case. 4⅛x16x9". 115 VAC.

13 A 2335 U. Shpg. wt., 14 lbs.....**279.95**

COMPACTS

HARMAN-KARDON
SCOTT•KENWOOD

Solid-state 3-piece Stereo Systems
. . superb hi-fi in space-saving form

HARMAN-KARDON

80-watt Stereo FM-Phono-Tape Cassette System 449⁵⁰

Model SC-2520. Versatile stereo compact includes stereo FM receiver, tape cassette recorder, 4-speed Garrard automatic turntable and two speaker systems. Record up to 2 hours direct from records, FM, or with your own mikes. Bass, treble, loudness controls. Stereo indicator light. Keyboard recording controls, record level meter. Stereo headphone jack. Switches for main, auxiliary speakers. Speaker systems have 8" woofer, 3" tweeter. 80 watts ±1 dB. 20-30,000 Hz. Receiver, 8½x18¼x17⅞"; speakers, 17¼x11¼x8¼". Walnut. 117 VAC. Less mikes.

13 A 0350 L2U. Shpg. wt., 75 lbs.......................449.50
13 A 2132 X. Molded Plastic Dust Cover. Wt., 2 lbs.......19.95

80-watt Stereo FM-AM-Phono with omnidirectional speakers 399⁹

Model SC-2350. Compact stereo FM-AM system featur omnidirectional speaker systems that can be placed behin chairs or drapes, used as end tables, or put wherever the look best, and still give you full stereo realism. Has fou speed Garrard automatic turntable. Receiver has integrate micro-circuits and wideband IFs. Inputs and contro for all music sources. Stereo headphone jack. Outputs fo extra pair of stereo speakers. Speaker systems have woofer, 2¼" tweeter. 80 watts ±1 dB; 60 watts IH ±1.5 dB, 18-30,000 Hz. Receiver, 8½x18$\frac{3}{16}$x17¾". Speak ers, 18x10¾x10¾". Walnut. 117 VAC. Dust cover, left.

13 A 0193 L3U. Shpg. wt., 70 lbs.......................399.9

H. H. SCOTT

50-watt Stereo FM-AM-Phono 339⁹⁵

Model 2503-17. Compact features sensitive stereo FM-AM receiver with FET front-ends on FM and AM, silicon transistors, 4-speed automatic turntable with Pickering stereo cartridge, and two 8" air-suspension speaker systems. Separate channel bass and treble controls, main and remote speaker switches, tape monitor, stereo headphone jack, front panel mike and guitar inputs. Automatic off switch. Speaker systems have 8" woofer, 3" tweeter. Power at 4 ohms: 50 watts ±1 dB; 40 watts IHF. 18-25,000 Hz. Walnut. Receiver, 9¼x16¼x15$\frac{9}{16}$"; speakers, 18x10½x8½". 117 VAC.

13 A 0931 L2U. Shpg. wt., 68 lbs.......................339.95
13 A 2677 X. Plastic Dust Cover. Wt., 5 lbs..........9.95

KENWOOD

38-watt Stereo FM-AM 199⁹

Model KS-33. Deluxe stereo FM-AM receiver syste features sensitive FET front-end and silicon-transist amplifier circuit to bring you magnificent stereo F Silent automatic FM stereo/mono switching. Precisio illuminated tuning meter; stereo indicator light. Co trols include loudness contour, bass, treble, AFC. Ta monitor. Stereo headphone jack. Two-way waln speaker systems have 6½" cloth-roll woofer and 2 cone-type tweeter. Outputs for extra pair of stere speakers. 38 watts ±1 dB; 30 watts IHF. ±2 dB, 3 40,000 Hz. Receiver has walnut finish metal case, 14 4¾x11¼". Speakers 8¼x14⅛x7⅞". 117 VAC. Japa

13 A 0916 L2U. Shpg. wt., 50 lbs.......................199.9

SHPG. NOTE: Items with suffix U, W or Z in stock no. sent tru or express. See Ordering Information page

Specially selected FM-AM-Phono Stereo Component Systems at great savings

HI-FI MANAGER'S
SYSTEMS

Harman-Kardon 90-watt Stereo System with Allied 2-way 8-inch speaker systems

Save $45.30 **279^{50}** less case

Separately, $324.80. Exciting selection of perfectly matched stereo components provides fine performance at big savings. Harman-Kardon 330 90-watt Solid-State Stereo FM-AM Receiver offers high sensitivity and wideband sound. Tape monitor, main and remote speaker switches, D'Arsonval signal-strength meter, automatic FM stereo-mono switching, ±1.5 dB, 7-50,000 Hz response. Takes case below.

Garrard 40B 4-speed Automatic Turntable and Base. Viscous damped cuing and stylus pressure gauge. Pickering P/ATE-1 elliptical-stylus Stereo Cartridge. Two Allied 3007 2-way 8" Speaker Systems. 8" woofer and 3½" tweeter in enclosure with oiled walnut veneer. With cables, hi-fi booklet.

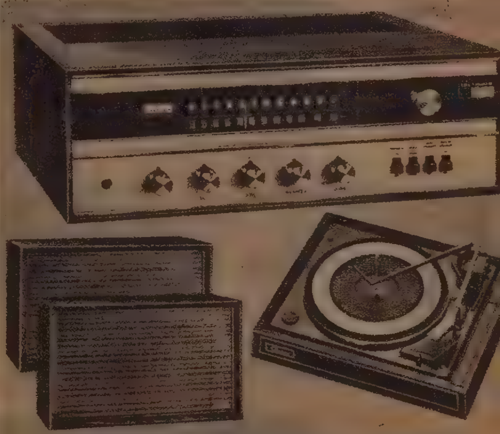
13 A 0977 D5U. Shpg. wt., 76 lbs............279.50
13 A 2069 X. Walnut Wood Case. Wt., 7 lbs.....21.95

Quality Scott 70-watt Stereo System with Allied 3-way 10" speaker systems

Save $55.80 **339^{00}** less case

Separately, $394.80. Enjoy the thrilling sound of true-to-life stereo realism with this excellent system. Scott 341X 70-watt Solid-State Stereo FM-AM Receiver features integrated circuits and silicon output transistors. Takes case below. Garrard SL55B 4-speed Automatic Turntable with Base. Has famous Synchro-Lab motor for perfect speed. Damped cuing and automatic intermix. Empire 808E elliptical-stylus Stereo Cartridge. Two Allied 3017 3-way 10" Assembled Speaker Systems. 10" woofer, 6" midrange, 3½" tweeter. Enclosed in walnut veneer cabinet with cane grille cloth. With cables and hi-fi booklet.

13 A 0976 D5U. Shpg. wt., 86 lbs..............339.00
13 A 2040 X. Walnut Wood Case. Wt., 6 lbs........20.82



Superb Fisher 65-watt Stereo System with Allied 3-way 12" speaker systems

Save $115.80 **419^{00}** less case

Separately, $534.80. Superb system offers exceptional performance at a tremendous savings. Fisher 175-T 65-Watt Solid-State Stereo FM-AM Receiver has Field-Effect-Transistors in front-end and integrated circuits in IF for superb stereo FM. Takes case below. Garrard SL65B 4-speed Automatic Turntable with Base. Synchro-Lab motor, adjustable counter-weight antiskate. Shure M93E elliptical-stylus Stereo Cartridge. Two Allied 2330A Assembled 3-way 12" Speaker Systems. Each has 12" woofer, 8" midrange, 3½" tweeter in walnut enclosure. With all cables, connectors, and Allied Music System Instruction Booklet.

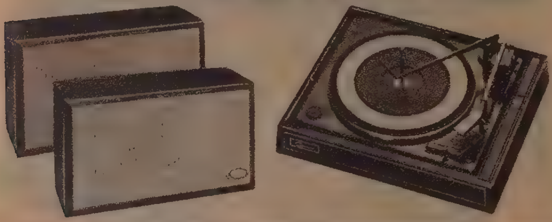
13 A 0975 D5U. Shpg. wt., 97 lbs. 419.00
13 A 2538 U. Walnut Wood Case. Wt., 8 lbs........19.95

Ensembles are ready to play—complete with cables, hi-fi booklet

HI-FI
MANAGER'S
SYSTEMS

Save up to $136.30 on these Stereo FM-AM-Phono Systems

Save
$115.30
349^{50}
$17 monthly*

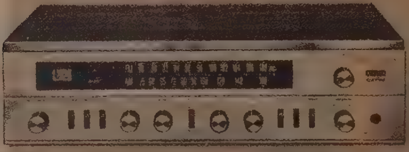


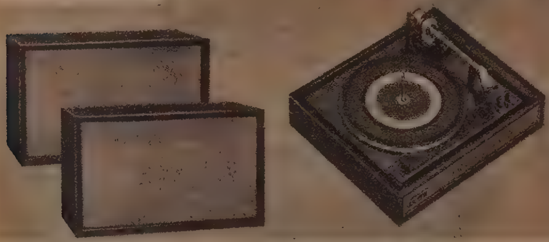
Kenwood 90-watt System has 10" speakers

Kenwood KR-77 Stereo FM-AM Receiver	$239.95
Garrard SL65B 4-speed Automatic Turntable	79.50
B-1 Base for turntable	5.50
Shure M93E Elliptical Stereo Cartridge	39.95
Two Allied 3017 10" Speaker Systems	99.90
COMPONENTS SEPARATELY	$464.80
SYSTEM PRICE	349.50
SYSTEM SAVINGS	$115.30

Fine system features Kenwood KR-77 with field-effect-transistor front end, integrated circuit IF and many other extras for superb stereo. With metal Case. Garrard SL65B 4-speed Automatic Turntable has Synchro-Lab motor, stylus force gauge, antiskate adjustment and viscous damped cuing. With Base. Shure M93E Stereo Cartridge has elliptical diamond stylus. Allied 3017 3-way speaker systems have 10" woofer, 6" midrange and 3½" tweeter. Sturdy ¾" wood enclosure has attractive walnut finish. With cables, hi-fi booklet.
13 A 0983 D5U. Shpg. wt., 91 lbs. 349.50

Save
$125.85
419^{95}
$19 monthly*



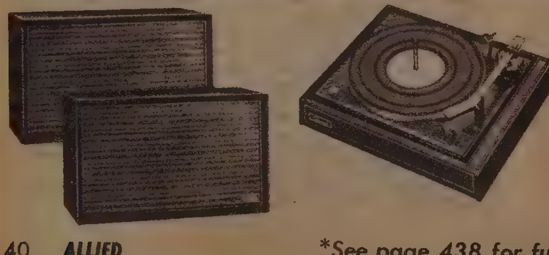


Eico 80-watt System with 10" speakers

Eico 3770 Stereo FM-AM Receiver	$279.95
Garrard SL72B 3-speed Automatic Turntable	89.50
B-2 Base for turntable	6.50
Empire 888E Elliptical Stereo Cartridge	39.95
Two Allied 3030B 10" Speaker Systems	129.90
COMPONENTS SEPARATELY	$545.80
SYSTEM PRICE	419.95
SYSTEM SAVINGS	$125.85

System features assembled Eico 3770 with silicon-transistor circuit, tape monitor and full preamp facilities for all music sources. With metal Case. Garrard SL72B 3-speed Automatic Turntable has Synchro-Lab motor, Auto-Rise safety platform, damped cuing, stylus pressure and antiskate adjustments. With Base. Empire 888E Stereo Cartridge has elliptical diamond stylus. Allied 3030B 3-way speaker systems have powerful 10" woofer, 6" midrange and 3½" tweeter. Walnut veneer finished enclosure. With cables, hi-fi booklet.
13 A 0984 D5U. Shpg. wt., 94 lbs. 419.95

Save
$136.30
489^{50} less case
$21 monthly*



Fisher 100-watt System with 12" speakers

Fisher 250T Stereo FM-AM Receiver	$299.95
Garrard SL75B 3-speed Automatic Turntable	109.50
B-2 Base for turntable	6.50
Pickering XV-15/400E Stereo Cartridge	49.95
Two Allied 2330A 12" Speaker Systems	159.90
COMPONENTS SEPARATELY	$625.80
SYSTEM PRICE	489.50
SYSTEM SAVINGS	$136.30

Powerful system features Fisher 250T with versatile preamp facilities, main and remote speaker switches. Takes optional case below. Garrard SL75B 3-speed Automatic Turntable has Synchro-Lab motor, Auto-Rise, cuing, antiskate and stylus pressure adjustments. With Base. Pickering XV-15/400E elliptical-stylus Stereo Cartridge. Allied 2330A 3-way Speaker Systems have 12" woofer, 8" midrange and 3½" tweeter. Walnut-finish enclosures have matching grille cloth. With cables, hi-fi booklet.
13 A 0985 D5U. Shpg. wt., 98 lbs. 489.50
13 A 2538 X. Walnut Wood Case. 8 lbs. 19.95

*See page 438 for full Credit details . . buy with no money down

Save up to $160.80 on deluxe Stereo FM-AM-Phono Systems

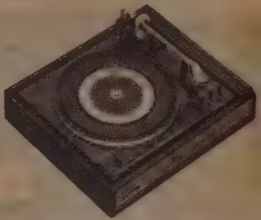
Scott 175-watt System with 10" speakers

Scott 386 Stereo FM-AM Receiver	$349.95
Garrard SL72B 3-speed Automatic Turntable	89.50
B-2 Base for turntable	6.50
Pickering XV-15/400E Stereo Cartridge	49.95
Two Allied 3030B 3-way Speaker Systems	129.90
COMPONENTS SEPARATELY	$625.80
SYSTEM PRICE	504.50
SYSTEM SAVINGS	$121.30

Superb system features Scott 386 with FET's, ICs, crystal filter IF and versatile preamp. Full controls for complete sound mastery. Takes optional case, below. Garrard SL72B has damped cuing, stylus pressure and antiskate adjustments. With Base. Pickering XV-15/400E Stereo Elliptical Cartridge. Allied 3030B 3-way Speaker Systems have high-compliance 10" woofer, 6" direct-radiator midrange and 3½" cone tweeter. Walnut veneer finish. With cables and hi-fi booklet.

13 A 0986 D5U. Shpg. wt., 99 lbs.	504.50
13 A 2733 X. Walnut Wood Case. 6 lbs.	26.95

Save
$121.30
504^{50} less case
$22 monthly*



Sherwood 125-watt System . . 12" speakers

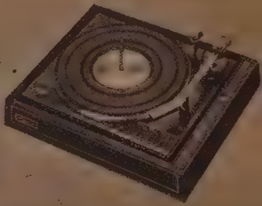
Sherwood S-7500 Stereo FM-AM Receiver	$329.95
Garrard SL75B 3-speed Automatic Turntable	109.50
B-2 Base for turntable	6.50
Shure M91E Stereo Elliptical Cartridge	49.95
Two Allied 2300C 3-way Speaker Systems	199.90
COMPONENTS SEPARATELY	$695.80
SYSTEM PRICE	549.00
SYSTEM SAVINGS	$146.80

Magnificent system features Sherwood S-7500 with FETs, ICs, crystal filter IF and deluxe preamp. Takes optional case below. Garrard SL75B has damped cuing, stylus pressure and antiskate adjustments. With Base. Shure M91E Stereo Elliptical Cartridge. Allied 2300C 3-way acoustic-suspension Speaker Systems have 12" woofer, horn-loaded compression midrange and compression tweeter. Solid ¾" wood enclosure has walnut finish. With cables and hi-fi book.

13 A 0987 D5U. Shpg. wt., 107 lbs.	549.00
13 A 2046 X. Metal Case. 8 lbs.	9.00
13 A 2047 X. Walnut Wood Case. 8 lbs.	28.00

Shown in wood case

Save
$146.80
549^{00} less case
$23 monthly*



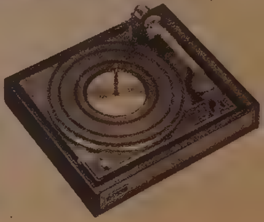
Fisher 190-watt System . . 12" speakers

Fisher 500-TX Stereo FM-AM Receiver	$449.95
Garrard SL95B 3-speed Automatic Turntable	129.50
B-2 Base for turntable	6.50
Empire 888VE Stereo Elliptical Cartridge	59.95
Two Allied 2370 12" Speaker Systems	259.90
COMPONENTS SEPARATELY	$905.80
SYSTEM PRICE	745.00
SYSTEM SAVINGS	$160.80

Connoiseur-quality system features Fisher's finest receiver with FETs, ICs, crystal filter IF and three methods of tuning. Optional case below. Garrard's finest Automatic Turtnable has damped cuing, stylus pressure and antiskate adjustments. With Base. Empire 888VE Stereo Elliptical Cartridge. Allied's finest shelf speaker systems have 12" acoustic-suspension woofer, horn-loaded compression midrange and tweeter. Walnut veneer finish and matching grille cloth. With hi-fi book and cables.

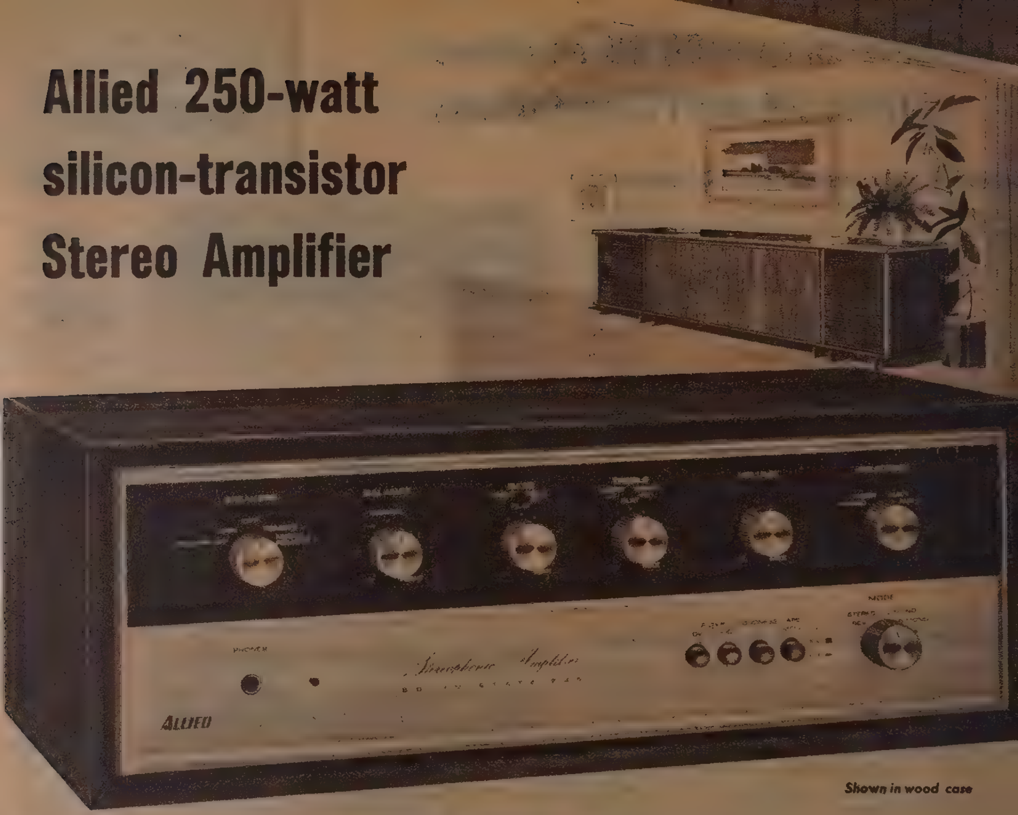
13 A 0988 D5U. Shpg. wt., 120 lbs.	745.00
13 A 2042 X. Walnut Vinyl Case. 9 lbs.	22.95

Save
$160.80
745^{00} less case
$31 monthly*



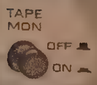
See page 438 for full Credit details . . low monthly payments

Allied 250-watt silicon-transistor Stereo Amplifier

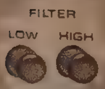


Shown in wood case

Silicon transistors cut distortion to the vanishing point, and are super reliable



Tape monitor switch permits comparison of signal source and tape output signal



Rumble and scratch filters eliminate noise from records, tape and radio

Stereo headphone jack permits private enjoyment of your music

199^{95} Metal Case

Silicon transistors, full array of controls and convenience features, and tremendous 250-watt output make this Allied's best stereo amplifier!

Model 995. Finest Allied amplifier ever! You get tremendous 250-watt powe distortion levels so low that they're almost unmeasurable, plus a preamplifie with control facilities for absolute mastery of any music program source. Yo could pay more and still not get an amplifier with this power or such complet control facilities.

Solid-state circuit features silicon transistors for long life and cooler high-powe operation. Preamp has complete tape recording facilities. Mode monitor switc has positions for stereo reverse, stereo normal, mono left, mono right and mon mixed (mono L-R). Pushbutton switches control scratch and rumble filter loudness contour, and tape monitor which permits instant comparison betwee signal source and tape output signal from 3-head tape decks. Five-positio switch controls AC power, main speakers, speakers off, remote speakers, an main plus remote speakers. Tone compensation provided by separate-chann bass and treble controls. Front panel stereo headphone jack lets you enjo your favorite hi-fi music in complete privacy.

Has three AC convenience outlets (one switched, two unswitched) at rear chassis. With rugged metal case; takes optional walnut wood case listed belov Size, 5½x16x13¾". For 110-120 VAC. From Japan.
14 A 5521 U. Shpg. wt., 26 lbs....................................199.9
14 A 5003 X. Walnut Wood Case. Shpg. wt., 6 lbs.........................19.9

SPECIFICATIONS

Power Output: 250 watts ±1 dB at 4 ohms; 200 watts IHF at 4 ohms; 60 watt rms per channel at 4 ohms. *Harmonic Distortion:* less than .08% at 45 W. *I Distortion:* less than 0.2% at 45 watts per channel with 8 ohm load. *Frequenc Response:* ±2 dB, 10-50,000 Hz. *Power Bandwidth:* 10-60,000 Hz at 1% har monic distortion. *Hum and Noise:* −65 dB on mag. phono; −75 dB on othe inputs. *Channel Separation:* better than 35 dB at 10 kHz. *Input Sensitivity:* 2. mV on mag. phono; 200 mV on aux. and tape monitor. *Tone Controls:* Bas ±9.5 dB at 100 Hz; treble, ±10 dB at 10,000 Hz. *Filters:* −10 dB at 10,000 H −6 dB at 100 Hz. *Damping Factor:* 30 at 8 ohm load.

Allied 250-watt Stereo Phono Systems

Shown in wood case

Our best 250-watt System has acoustic-suspension speakers

Separately, $585.80. Our finest 250-watt phono system features the Allied 995 Stereo Amplifier. Includes metal case; takes optional walnut wood case below.

Famous Garrard SL95B 3-speed Automatic table has cuing and pause control, optical-type stylus pressure gauge and antiskating adjustment. Precision Synchro-Lab motor assures perfect record speed regardless of line voltage fluctuations. With Base. Pickering XV-15/400E Stereo Cartridge has .0003x .0009″ elliptical diamond stylus and "Dustamatic" record cleaning brush.

Deluxe Allied 2300C three-way Speaker Systems have high-compliance 12″ acoustic-suspension woofer for deep, natural bass. Compression midrange with diffraction horn delivers outstanding midrange sound. Ring radiator compression tweeter disperses clean, sparkling highs. Sturdy ¾″ wood enclosure has handsome walnut veneer finish with matching grille cloth.

With all necessary connecting cables and informative hi-fi booklet.

14 A 0338 D5U. Shpg. wt., 126 lbs. . . . 399.95
14 A 5003 X. Walnut Case. 6 lbs. 19.95

Save $^{\$}185.85$

399^{95} Metal Case

Shown in wood case

Shown in wood case

Our lowest priced 250-watt System

Save $^{\$}144.85$ **299^{95}** Metal Case

Separately, $444.80. Our lowest priced 250-watt Stereo Phono System features the Allied 995 Stereo Amplifier with metal case; takes optional walnut wood case above. Garrard SL65B 4-speed Automatic Turntable has Synchro-Lab motor, cuing, stylus pressure gauge and antiskate adjustment. With Base. Empire 808E Stereo Cartridge has .0004 x.0009″ elliptical diamond stylus. Allied 3030B three-way Speaker Systems have 12″ high-compliance woofer, 6″ midrange radiator and 3½″ tweeter. Walnut veneer finish with matching grille cloth. Cables and hi-fi booklet.

14 A 0339 D5U. Shpg. wt., 87 lbs. 299.95

Better System with bass-reflex speakers

Save $^{\$}154.85$ **329^{95}** Metal Case

Separately, $484.80. High-performance Stereo Phono System features the 250-watt Allied 995 Stereo Amplifier with metal case; takes optional walnut wood case above. Garrard SL65B 4-speed Automatic Turntable has Synchro-Lab motor for perfect record speed. With Base. Empire 888E Stereo Cartridge has .0004x.0009″ elliptical diamond stylys. Two Allied 2330A three-way Speaker Systems have 12″ woofer with cloth-roll suspension. 8″ midrange radiator and 3½″ cone tweeter. Walnut veneer finish with complementary grille cloth. Cables and hi-fi booklet.

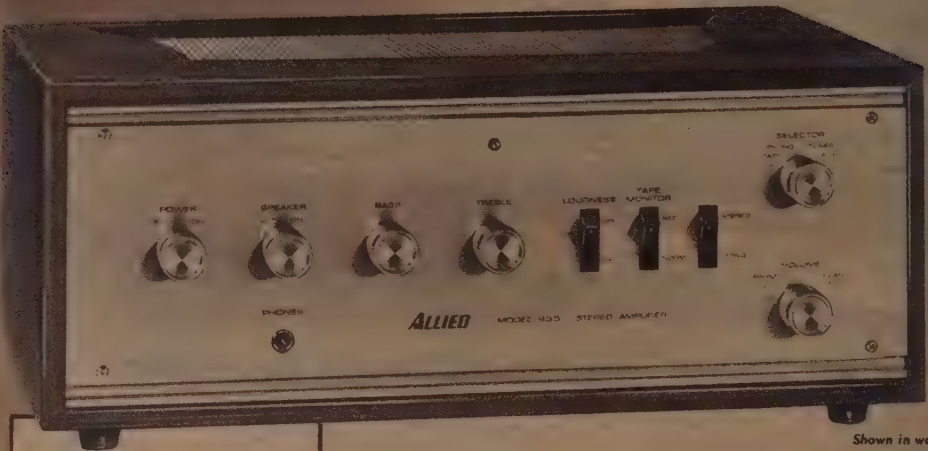
14 A 0342 D5U. Shpg. wt., 101 lbs. 329.95

Allied® 40-watt Stereo Amplifier . . proven circuit permits superb hi-fi and important extra features even at this low price

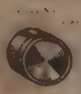
69^{95} Metal Case

$5 monthly

see page 438



Shown in wood case



Concentric volume control adjusts channels together or individually

Monitor switch to compare tape with program source (with 3-head deck)

Front-panel stereo headphone jack for personal listening

Model 935. This full-feature stereo amplifier outperforms all others in its price class. Offers thrilling, lifelike stereo at a low price. Delivers 64 watts peak stere power for music with thrilling full-dynamic-range, plus deep and powerfu bass. Full midrange and sparkling, crystal-clear highs, too. Provides a wide array of controls, inputs and outputs for complete mastery of every music source an application. Dual concentric volume controls let you adjust channels togethe or separately. Has front-panel stereo headphone jack for full-volume listenin without disturbing others. Boasts sturdy mechanical construction featuring beautiful Sierra Gold 3/16″ thick extruded aluminum front panel with machine knobs. Equalized magnetic phono, ceramic phono and tape inputs plus tune and aux. inputs. Rocker switches offer fingertip control. Seven tube, 4-diod circuit. 4¾x13¾x9¾″. With brown metal case; wood case below. For 110-12 V, 60 Hz AC. From Japan.

14 A 5525 U. Shpg. wt., 22 lbs.	69.9
14 A 5005 X. Oiled Walnut Wood Case. Shpg. wt., 5 lbs.	12.9

SPECIFICATIONS

Power: 40 watts ±1 dB; 32 watts IHF; 12 watts per channel rms. *Response* ±2 dB, 20-30,000 Hz. *Harmonic Distortion:* 1% at rated output. *Hum and Noise* Magnetic phono, −55 dB, Auxiliary, −70 dB. *Inputs:* Magnetic Phono; Tuner Ceramic or High-Level Auxiliary; Low-Level Auxiliary; Tape Recorder *Sensitivity:* Magnetic Phono, 2.3 mV. *Outputs:* 8 or 16 ohms per channel; Stere Headphone Jack; Recorder; Tape and Source Monitoring. *Two AC Convenienc Outlets:* one switched by amplifier.

Save $49.85

149^{95}

32-watt Stereo Phono System

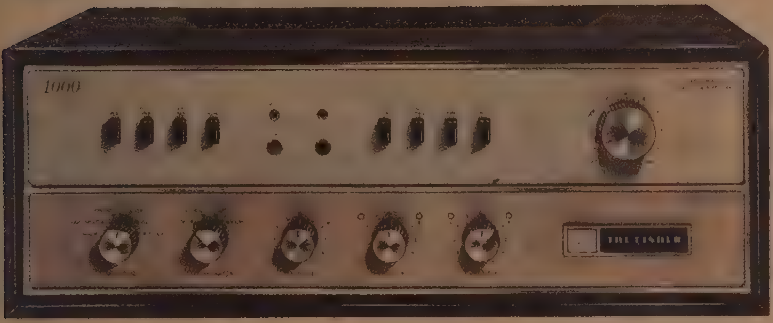
Allied 935 Stereo Amplifier	**$69.95**
Garrard 40 B Turntable	**44.50**
B-1 Walnut Turntable Base	**5.50**
Pickering V15/ACE-3 Stereo Cartridge	**29.95**
Two Allied 3007 8″ Speaker Systems	**49.90**
Total	**$199.80**
System Price	**149.95**
YOU SAVE	**$49.85**

Allied 935 Amplifier with metal case; optional wood case above. Garrard 40B four-speed Automatic Turntable with Walnut Base. Pickering V15/ACE-3 Stereo Elliptical Cartridge. Two Allied 3007 2-way 8″ walnut Speaker Systems. 8″ woofer, 3½″ tweeter. Cables, hi-fi booklet.

14 A 0220 D5Z. Shpg. wt., 71 lbs.	149.95

Stereo components are available on Credit Terms . . order today

Fisher's finest Stereo Amplifier . . silicon transistors and 120-watt power



329.95 less case

$16 monthly*

Power, styling and control flexibility for the connoisseur

Model TX-1000. Tremendous power, handsome styling and complete control flexibility make this Fisher's finest solid-state stereo amplifier. Circuit has silicon transistors for total stability. Transformerless output stage is protected by famous Transist-O-Gard® overload protection circuit. Versatile preamp permits absolute mastery of any music program source.

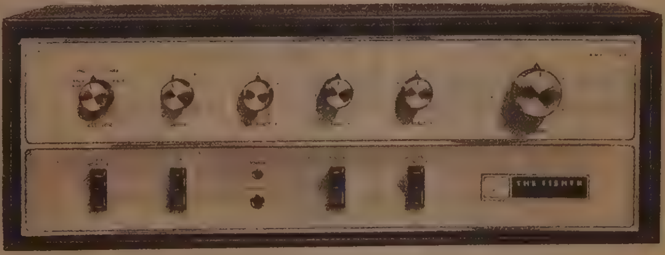
Convenient pushbuttons control main, center and remote speakers, mono/stereo mode, dual high filters, rumble filter and loudness contour. Also has 4-position tape monitor and 6-position program selector switches, clutch-type bass and treble tone controls, balance control, mono and stereo program indicator lights, stereo headphone jack and front-panel tape dubbing jack. Power at 4 ohms: 120 watts IHF, 50 watts rms per channel. Response: ±1.5 dB, 20-40,000 Hz. Harmonic Distortion: 0.5%. IM Distortion: 0.8%. Hum and Noise: −90 dB.

Inputs: mike, tape head, phono, tuner, auxiliary 1 and 2. Outputs: 4-16 ohms, stereo headphones, tape recording. Elegant gold-plated front panel. Takes optional wood case below. Overall size, $4\frac{13}{16}$x$15\frac{1}{8}$x$12\frac{3}{4}$″ deep. For 117 VAC. Shpg. wt., 24 lbs.

13 A 2652 U.	329.95
13 A 2629 X. Walnut Wood Case. Shpg. wt., 8 lbs.	22.95

Fisher low-priced 65-watt solid-state Stereo Amplifier

149.95 less case $8 monthly*



Model TX-50. This attractively styled amplifier gives you an advanced solid-state circuit with versatile preamp and husky 65-watt stereo amplifier. And it's priced low to fit into almost anyone's budget. Convenient rocker switches control main and remote speaker systems, plus high filter (to cut phono needle scratch) and loudness contour. Also has program selector switch for phono, tuner, auxiliary.

Ganged bass and treble tone controls have costly Baxandall feedback circuits for distortion-free tone compensation. Has balance control, mono/stereo mode switch and AC power/volume control. Front panel stereo headphone jack permits enjoyment of beautiful high-fidelity music in complete privacy. Transformerless output stage is protected against any short-circuits by Fisher's patented Transist-O-Gard® overload circuit. Power at 8 ohms: 65 watts ±1 dB, 20 watts rms per channel. Harmonic Distortion: 0.5% at full power output. IM Distortion: 1% at rated output. Power Bandwidth: 25-25,000 Hz. Hum and Noise: 85 dB below rated output.

Striking gold-color front panel retains its stylish appearance for life. Takes oiled walnut wood case below. $4\frac{13}{16}$x$15\frac{1}{8}$x9″. For 117 VAC. Shpg. wt., 16 lbs.

13 A 2068 U.	149.95
13 A 2629 X. Walnut Wood Case. Shpg. wt., 6 lbs.	22.95

*See page 438 for full Credit details

AMPLIFIERS

H. H. SCOTT
MARANTZ

See page 471 for Scott Components in kit form

Scott's most powerful Stereo Amplifier . . 160 watts

249^{9} le cc
$13 Monthl

A

Scott 82-watt full-feature Stereo Amplifier

179^{95} less case
$9 monthly*

B

(A) 160-watt solid-state Stereo Amplifier

Model 260B. Delivers 160 watts for thrilling stereo realism. Features transformerless output; 7-position input switch; bass and treble controls for each channel; rumble and noise filters. Also has pushbutton selector switches; tone control bypass switch; speaker switches; mike inputs; selectable phono sensitivity. *Power at 4 Ohms:* 160 watts ±1 dB; 120 watts IHF; 40 watts/channel rms at 8 ohms. *Response:* ±1 dB, 15-30,000 Hz. *Outputs:* 4-16 ohms, tape, headphone. Takes optional case below. 5¼x15½x13¼". 115 VAC.

13 A 2732 U. Shpg. wt., 21 lbs. 249.95
13 A 2040 X. Deluxe Oiled Walnut Wood Case. 6 lbs. . . 22.50

(B) 82-watt solid-state Stereo Amplifier

Model 299F. Silicon solid-state amplifier has tape monito ing facilities; separate bass and treble controls for ea channel; headphone jack; scratch filter; dual speak switching for main, remote, or simultaneous operati Direct-coupled output for full response. *Power Output 4 Ohms:* 82 watts ±1 dB; 65 watts IHF; 18 watts rm channel at 8 ohms. *Response:* ±1 dB, 18-25,000 H *Harmonic Distortion:* 0.8%. With chassis enclosur Takes optional case below. 5¼x15½x12". For 115 VA

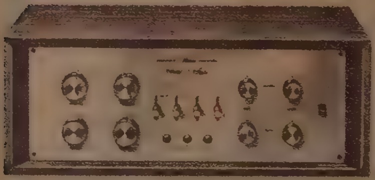
13 A 2737 U. Shpg. wt., 14¼ lbs. . . . . 179.
13 A 2040 X. Deluxe Oiled Walnut Wood Case. 6 lbs. . . 22.

For the perfectionist . . deluxe Stereo Preamplifier

325^{00} less case
$16 Monthly*

For finest stereo . . 160-watt Stereo Basic Amplifier

395^{00} less case
$18 monthly*



MARANTZ
Matching Stereo Preamp and 160-watt Basic Amplifier

Solid-state Stereo Preamplifier

Model 7T. Ideal companion for Model 16 basic amplifier at right. Unsurpassed for versatility and quality of sound. Two front panel jacks let you record, play back, or copy with external tape recorder. Stereo headphone jack automatically cuts off speakers when plugged in. Separate bass and treble controls for each channel. Inputs for mike, 2 phonos, tape head, tuner, TV, and 2 aux. Four stereo outputs. Flat from 20-20,000 Hz. *IM Distortion:* 0.15%. Optional case below. 5¾x15¾x8½". 117 VAC.

13 A 2280 U. Shpg. wt., 15 lbs. 325.00
13 A 2270 X. Walnut Wood Case. Shpg. wt., 9 lbs. 24.50

Solid-state Basic Stereo Amplifier

Model 16. Features all silicon transistor circuit that develo 80 watts rms per channel at 8 ohms. Separate power su plies for each channel assure complete isolation. Dire coupled amplifiers provide instantaneous recovery fr overload and full rated power throughout the entire f quency range. *Response:* ±1 dB, 10-60,000 Hz. *Harmo Distortion:* under 0.1%. *IM Distortion:* under 0.1%. *Noi* −110 dB. Ideal for use with 7T Preamp. Optional ca below. 5¾x15¾x7". 117 VAC.

13 A 2093 U. Shpg. wt., 34 lbs. 395.
13 A 2452 X. Walnut Case. Shpg. wt., 9 lbs. . . . . 29.

**See page 438 for full Credit deta*

Dyna solid-state 120-watt Basic Stereo Amplifier

199.95
$10 monthly*

See pages 468-470 for Dyna components in kit form

Dyna solid-state Preamplifier . . for Stereo 120

129.95 $7 monthly*

120-watt solid-state Stereo Basic Amplifier

eo "120." Delivers magnificent stereo with complete dom from coloration. All silicon transistors for superior oility and reliability. No response-limiting interstage or put transformers. Output transistors electronically pro-ed. Self-adjusting bias circuit. Regulated power supply. *put:* 60 watts rms per channel. *Response:* ±0.5 dB, 5-,000 Hz. *Harmonic Distortion:* under 0.5%. *IM Distor-*: under 0.5%. *Noise:* —95 dB. Use with PAT-4 Preamp. ted chassis, metal cover. 4x13x10½". For 120/240 V, 60 Hz AC.

2234 U. Shpg. wt., 20 lbs....................199.95

B Versatile solid-state stereo Preamplifier

Model PAT-4. Perfect mate for the "Stereo 120" or any other basic amplifier. All silicon-transistor design for superior stability. Positive-action rocker switches control loudness, power, tape monitor, lo-filter, dual modes. Four-position hi-filter. Also has six-position selector switch, volume, balance, bass and treble controls for each channel. Inputs for high and low level phono cartridges, tape head, tuner, tape recorder. Front-panel input for guitar or recorder. *Response:* ±0.5 dB, 10-100,000 Hz. 4¼x13½x8". 120/240 V, 50-60 Hz AC.

13 A 2241 X. Shpg. wt., 11 lbs....................129.95

SELECTOR
STEREO - MONO
BASS
TREBLE
LOUDNESS
BALANCE
SHERWOOD

Shown in metal case

Sherwood 100-watt solid-state Stereo Amplifier

189.50 less case
$10 monthly*

del 9500B. Boasts all silicon semiconductors, the choice designers where maximum reliability and superior per-mance are required. Has separate rocker switches for in and remote stereo speakers. Separate bass, treble trols; volume control. Single-knob balance control for /right compensation.

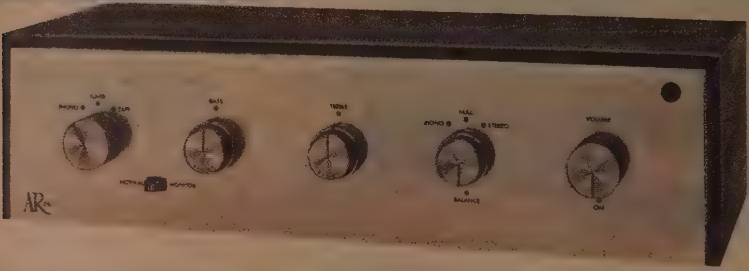
cker switches offer easy fingertip control. Tape-monitor mits instantaneous A-B comparisons for flawless tape ording. Loudness contour defeat switch on front panel. High filter suppresses annoying scratch or hiss. Fused overload protection of output transistors. Separate monophonic speaker terminals: front-panel headphone jack. *Power Output at 4 Ohms:* 100 watts ±1 dB; 80 watts IHF, 30 watts/channel rms. *Response:* ±1 dB, 12-35,000 Hz. Takes optional case below. 4x14x10". For 117 VAC.

13 A 2455 U. Shpg. wt., 13 lbs....................189.50
13 A 2401 X. Walnut-Grained Metal Case. 5 lbs..........7.50
13 A 2427 X. Walnut Wood Case. Shpg. wt., 7 lbs.....28.00

AMPLIFIERS

ACOUSTIC RESEARCH
EICO • KENWOOD

Connoisseur-quality Stereo Amplifier
by Acoustic Research..full 120-watt
rms power with inaudible distortion



250^{00} less case

$13 monthly
see page 438

Exceptional dynam
range . . handles
loudest passages
without distortion

AR Inc. A powerful 120-watt stereo amplifier with important circuit advancements at an outstanding low price. All silicon transistors and DC driver clamping circuit boost usable dynamic range, and hold harmonic distortion to less than 0.5% even at full 120-watt output. Wonderfully clear sound, with flat response from 20-20,000 Hz at all power output levels, including full volume. Idler power supply prevents turn-on noise bursts when main amplifier switch is off. Null circuit for perfect channel balance. 60-watts-per
channel rms power drives any speaker system to mag
cent sound. Clutch-type bass, treble controls for
channel. Power Output: 120 watts rms at 4 ohms; 100 w
at 8 ohms. Inputs for magnetic phono, tuner, tape.
puts: 4-16 ohms; tape. In handsome black metal
Takes optional walnut case below. For 117 VAC. Size,
15¾x10" deep.
13 A 2445 U. Shpg. wt., 21 lbs. 25
13 A 2446 X. Oiled Walnut Wood Case. Wt., 6 lbs. 1

Eico silicon transistor 80-watt Stereo Amplifier

139^{95}

"Cortina" 3070. Here's an amplifier with many deluxe features at an unusual low price. All-silicon-transistor circuit for pure, undistorted stereo. High-gain preamp has high overload level. Tape monitoring facilities, high and low-cut filters. Speaker switch for off/main/remote/all. Mono and stereo selection. Separate volume and balance controls. Inputs for magnetic phono tuner, aux., tape. Power output at 4 ohms: 80 watts ±1 dB; 70 watts IHF; 20 watts rms per channel. Response: ±1.5 dB, 5-100,000 Hz. Outputs: 4-16 ohms; stereo headphones; tape recording. With metal case. 3⅛x12x7¾". 117 VAC.
13 A 2339 U. Shpg. wt., 8 lbs. 139.95

Eico components in kit form on pages 472-473

Eico silicon transistor 190-watt Stereo Amplifier

225

"Cortina" 3150. Features transformerless dr
and output stages—peaks, transients and po
bursts are reproduced effortlessly, and resp
is extended. Almost unmeasurable 0.15%
monic distortion. Scratch, rumble filters supp
needle-scratch. Complete array of inputs
controls. Tape monitor. Can drive two set
speakers. Electronic output transistor and sp
er protection. Power output at 4 ohms: 190 w
±1 dB; 150 watts IHF; 50 watts rms per char
Response: ±1.5 dB, 10-30,000 Hz. Outp
4-16 ohm speakers, tape. With walnut g
metal case. 3⅛x14⅜x8¼". 117 VAC.
13 A 2253 U. Shpg. wt., 17 lbs. 22

Kenwood 225-watt solid-state Stereo Amplifier with deluxe preamp

249^{95}

7 stereo inputs;
8 stereo outputs

Model KA-6000. For the more demanding au
phile. Key-type muting switches for loudness
high and low filters. Step-type tone cont
Input indicator lights. Tape monitor. Respo
±1 dB, 10-50,000 Hz. Distortion: 0.5%. Po
output at 4 ohms: 225 watts ±1 dB; 180 w
IHF; 60 watts rms per channel. Inputs inc
high and low level mag. phono, tape head, n
Complete outputs include for 2 pairs speak
stereo headphone tape. Metal case, walnut
panels 115 VAC. Size, $5\frac{5}{32}$x$16\frac{5}{16}$x$11\frac{1}{32}$". Ja
13 A 2086 U. Shpg. wt., 25 lbs. 24

SHIPPING NOTE: Items with suffix U, W or Z in stock no. sent
or express. See Ordering Information p

AMPLIFIERS

BOGEN • ELECTRO-VOICE
SANSUI • KENWOOD

Bogen 60-watt Stereo Amplifier has silicon transistors for finest sound

PHONES
POWER
ON
OFF
MODE
STEREO
MONO
BASS
TREBLE
BALANCE
LOUDNESS
SELECTOR
TAPE
AUX
PHONO
TUNER

119^{95} Metal Case

$6 monthly*

Modular transformerless circuit assures highest reliability and great stereo hi-fi sound!

Shown in wood case

el TA-150. Here's a low-priced amplifier with full con-
facilities for all program sources, plus 60-watt power
·ive even low-efficiency speaker systems to room-filling
me. Silicon-transistor transformerless output circuit
wide frequency response and full dynamic range.
ular construction assures super reliability and ease of
ir should service ever be required. Two-position slide
hes control AC power on/off and mono/stereo mode.
ry switch selects phono, tape, auxiliary and tuner.
has volume, balance, ganged bass and treble tone controls; headphone jack permits listening to music in privacy. Fused output transistor protection. Power Output at 4 ohms: 60 watts ±1 dB, 50 watts IHF; 15 watts rms per channel. Response: ±1 dB, 20-50,000 Hz. Power Bandwidth: 20-22,000 Hz. Inputs: magnetic phono, tape and auxiliary. Outputs: 4-16 ohms (2 pair), tape and headphones. Wood-grain metal case; optional wood case below. 3¾x14½x10". For 117 VAC.

13 A 2512 U. Shpg. wt., 15 lbs. 119.95

13 A 2511 X. Walnut Wood Case. Shpg. wt., 7 lbs. 24.95

nsui silicon solid-state 60-watt Stereo Amplifier has full array of controls

119^{95}

$6 monthly*

el AU222. Compact stereo amplifier boasts deluxe
mp and silicon transistors. Tape monitor, rumble
scratch filters, mode switch and stereo head-
e jack. Transformerless circuit for wide response:
dB, 20-30,000 Hz. Power Output at 8 ohms: 60
s at ±1 dB, 46 watts IHF, 18 watts rms per chan-
Harmonic Distortion: less than 0.8%. Hum and
e: better than −60 dB. Satin black front panel.
al case. 4⅜x11½x10½". 117 VAC. Japan.
2100 X. Shpg. wt., 13 lbs. 119.95

Kenwood's lowest priced solid-state tereo Amplifier delivers clean 50 watts

89^{95}

$5 monthly*

el KA-2000. Fits on any bookshelf and has the
er and many features of higher priced models.
e monitor; loudness compensation; stereo head-
ne jack. Power Output at 4 ohms: 50 watts ±1 dB,
vatts IHF, 15 watts rms per channel. Response: 20-
00 Hz. Inputs: mag. phono, tuner, tape and aux.
puts: 4-16 ohms, tape and headphones. Metal
. 4⅜x10¼x9⅜". For 117 VAC. Japan.
2493 X. Shpg. wt., 13 lbs. 89.95

Electro-Voice 80-watt Stereo Amplifier

129^{60}

$7 monthly*

Model 1244. Solid-state stereo amplifier boasts compact size and powerful 80-watt output. Color-coded lights indicate program. Tape monitor, loudness compensation and stereo headphone jack. Power Output at 4 ohms: 80 watts ±1 dB, 65 watts IHF, 18 watts rms per channel. Response: ±1.5 dB, 20-20,000 Hz. Inputs: magnetic phono, tape, tuner and aux. Outputs: 4-16 ohms tape. Metal cover, walnut end panels. 3⅜x8¾x10¼". For 117 VAC.

13 A 2766 X. Shpg. wt., 11 lbs. 129.60

Electro-Voice solid-state 36-watt Stereo Amplifier

79^{90}

$5 monthly*

Model 1122. Compact solid-state stereo amplifier's clean, uncluttered styling fits into any decor. Features color-coded program lights, bass and treble tone controls, and stereo headphone jack. Power Output at 4 ohms: 36 watts ±1 dB, 30 watts IHF, 10 watts rms per channel. Response: ±1.5 dB, 20-20,000 Hz. Inputs: magnetic phono, tuner and auxiliary. Outputs: 4-16 ohms, headphones. Walnut-finish case. 4¼x15¾x8½". For 117 VAC.

13 A 2762 X. Shpg. wt., 18 lbs. 79.90

HI-FI
MANAGER'S
SYSTEMS

Save up to $114.85 on Stereo Phono
Systems with deluxe amplifiers

Save
$74.85
249^{95}

Stereo Phono System with Eico 80-w
assembled solid-state amplifier

Separately, $324.80. Specially selected system po
by Eico's assembled 3070 with walnut finish
case. Garrard SL55B 4-speed Automatic Turn
has Synchro-Lab motor, stylus pressure adjust
cuing and automatic record intermix. Base. P
ing V15/ACE-3 Stereo Cartridge has .0005x.
elliptical diamond stylus. New Allied 3017
way Speaker Systems have 10" woofer, 6" mid
radiator and 3½" cone tweeter. Walnut ve
matching grille cloth. Cables and hi-fi book.
13 A 0924 D5U. Shpg. wt., 65 lbs. 2

System with 190-watt Eico Amplifier

Save
$109.90
339^{95}

Separately, $449.85. Assembled so
state 3150 with metal case; G
rard SL55B with Base, Picker
V15/ACE-3, Allied 3030B 3-way
Speaker Systems. Cables, hi-fi bo
13 A 0923 D5U. Wt., 89 lbs. . .339

Save
$84.85
279^{95}

Stereo System with Fisher 65-watt solid-st
Amplifier and 10" Speaker Systems

Separately, $364.80. High performance system
tures Fisher TX-50; takes optional case b
Garrard SL65B 4-speed Automatic Turntabl
cuing, antiskate, stylus force adjustment and
chro-Lab motor. With Base. Shure M93E S
Elliptical Cartridge. Allied 3017 three-way Sp
Systems have high-compliance 10" woofer, 6"
range and 3½" wide dispersion tweeter. Attra
walnut veneer finish. With cables and hi-fi bo
13 A 0413 D5U. Shpg. wt., 83 lbs. 2
13 A 2629 X. Walnut Case. Wt., 6 lbs. . . . .

Above with 12" 3-way Speaker System

Save
$104.85
329^{95}

Separately, $434.80. Same as Fi
system above but with Allied 23
Speaker Systems which have
woofer, 8" midrange and 3½" tw
er. With cables and hi-fi bookle
13 A 0922 D5Z. Wt., 108 lbs. . .32

Save
$94.85
419^{95}

Stereo System with Dynaco silicon solid-st
80-watt Amplifier and 12" Speaker Syster

Separately, $514.80. Premium performance and
hi-fi sound. Features Dynaco SCA-80 with
case. Garrard SL65B 4-speed Automatic Turn
offers cuing, antiskate compensation, stylus
pressure gauge and perfect-pitch Synchro
motor. With Base. Pickering XV-15/400E S
Cartridge has .0003x.0009" elliptical dia
stylus. Allied 3030B three-way Speaker Sys
have 12" high-compliance woofer, 6" cone mid
radiator and 3½" wide dispersion tweeter.
cables, hi-fi booklet.
13 A 0411 D5U. Shpg. wt., 95 lbs. 4

Above, with better 12" Speaker System

Save
$114.85
429^{95}

Separately, $544.80. Same as Dyn
system above but with Allied 23
Speaker Systems which have
woofer, 8" midrange and 3½" tw
er. With cables and hi-fi bookle
13 A 0412 D5Z. Wt., 105 lbs. . .42

Write to our Audio Department for money-saving System quotations

st Allied® Stereo FM-AM Tuner! icon transistors, ICs, FETs, ystal filters and dual meters

249⁹⁵ Metal Case

$13 monthly
see page 438

Shown in wood case

el 295. This magnificent all silicon transistor tuner has every advancement ssary to give you the finest reception of stereo-FM and AM. Field-effect-sistors in the front end pull in static-free stereo even in fringe areas. Four inte-ed circuits and two crystal filters in the IF circuit assure razor-sharp selec-y that rejects interference and unwanted stations. Crystal filters never need gnment, prevent deterioration in performance. Center-channel meter, *plus* al-strength meter for perfect tuning. Pushbuttons for AFC, between-station ing, and high blend. Outputs for tape recording. FM output level controls. ched AC convenience outlet. Built-in AM antenna, provision for FM and external antennas. With metal case; takes optional wood case below. 5½x 3¾". For 117 VAC. Japan.

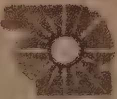
5520 U. Shpg. wt., 25 lbs.	249.95
5003 X. Oiled Walnut Wood Case. Shpg. wt., 6 lbs.	19.95

SPECIFICATIONS

IRCUIT. *Sensitivity:* 1.5 microvolts. *Frequency Response:* ±1 dB, 15-20,000 Hz. *al-to-Noise Ratio:* better than 60 dB. *Image Rejection:* 90 dB. *Alternate nnel Selectivity:* 65 dB. *IF Rejection:* 90 dB. *Capture Ratio:* 1.5 dB. *Har-ic Distortion:* 0.6% at 100% modulation. *Stereo FM Separation:* better 35 dB at 1000 Hz. **AM CIRCUIT.** *Sensitivity:* 10 microvolts at 1 MHz. *Selec-y:* 30 dB ±10 kHz.

Center channel indicator for exact tuning

Stereo light shows when you're tuned to stereo FM



Selector switch for AM, FM Mono, and FM Auto

Easy flywheel tuning for smooth dialing

Lowest priced Allied Stereo FM-AM Tuner . . sensational value

79⁹⁵ Metal Case

$5 monthly
see page 438

Shown in wood case

del 285. Even our lowest priced Allied tuner gives you important features en reserved for expensive tuners. Deluxe 8-tube circuit has time-switching ltiplex, three IF stages and wideband ratio detector for excellent stereo FM. livers clear AM too. Precision signal-strength meter and flywheel weighting plify tuning. Four-position switch selects stereo FM with AFC, monophonic with AFC, monophonic FM without AFC, and AM. Also has stereo indi-or light, AC power switch, tape and preamp outputs, ferrite rod AM antenna, provision for external AM and FM antennas. Sierra Gold extruded alumi-n front panel matches Allied 935 on page 44. With metal case: takes optional od case below. 4¾x13¾x9¾". For 117 VAC. Japan.

A 5526 U. Shpg. wt., 20 lbs.	79.95
5005 X. Oiled Walnut Wood Case. Shpg. wt., 5 lbs.	12.95

SPECIFICATIONS

FM CIRCUIT. *Sensitivity:* 2.5 μV for 20 dB quieting. *Frequency Response:* ±2 dB, 20-20,000 Hz. *Harmonic Distortion:* 1% at 100% modulation. *Channel Separation:* better than 30 dB. *Image Rejection:* better than 30 dB. *IF Stages:* three; shielded for hum-free operation. **AM CIRCUIT.** *Sensitivity:* 12 μV for 20 dB quieting.

IIPPING NOTE: Items with suffix U, W or Z in stock no. sent truck or express. See Ordering Information pages.

TUNERS

SCOTT • KENWOOD
SHERWOOD

Scott Stereo FM-AM Tuner has FETs and ICs for superb FM

199^{9}
$10 mont

See the Scott LT-112B-1 Tuner in Kit Form on page 471 in Kit Section

Shown in wood case

Model 330T. Advanced tuner delivers outstanding stereo and mono FM; wideband AM too. Silver-plated field-effect-transistor front-end and integrated circuit IF strip provide sensitive, static-free reception with fine separation in stereo. Automatic time-switching multiplex, Perfectune® automatic tuning meter, stereo indicator light and flywheel tuning. Switchable filter cuts out noise on weak stereo stations. With tape recording outputs. Full array of stereo inputs. Takes optional case below. 5x15x14". 117 VAC

13 A 2181 U. Shpg. wt., 17 lbs. 199.95

13 A 2184 X. Walnut Wood Case. Wt., 6 lbs. 22.50

SPECIFICATIONS

FM Circuit. FET front-end with integrated circuit IF st Equipped with interstation muting. *Sensitivity:* 1.9 IHF. *Signal-to-Noise Ratio:* 60 dB. *Alternate Chan Selectivity:* 40 dB. *Capture Ratio:* 2.5 dB. *Frequency sponse:* ±1 dB, 50-15,000 Hz. *Cross Modulation Rejecti* 80 dB. *Harmonic Distortion:* 0.8% at 100% modulati *Stereo Separation:* 40 dB at 400 Hz. **AM Circuit.** FET fro end. *Sensitivity:* 3 μV for 20 dB signal-to-noise ra *Selectivity:* 30 dB adjacent channel rejection. *Anten* built-in rod.

Scott's best stereo FM Tuner . . for perfectionists

249^{95}
le
ca

Model 312D-1. Features silver-plated field-effect-transis front end and integrated circuit IF strip for high se tivity, low noise and better stereo separation. Cry filters in the IF strip provide phenomenal selectiv Tuning meter, stereo FM light, interstation muting; t recording, headphone and oscilloscope outputs. Se tivity: 1.7 μV. Signal-to-Noise Ratio: 65 dB. Ta optional case below. 4½x15½x13¼". 117 VAC.

13 A 2182 U. Shpg. wt., 13 lbs. 24

13 A 2040 X. Walnut Wood Case. 6 lbs. 20

Kenwood's finest solid-state Stereo FM-AM Tuner

249^{95}

Model KT-7000. Kenwood's best tuner has field-eff transistor front-end and integrated circuit IF strip super-sensitive, noise-free FM; wideband AM too. crystal filters in the IF provide superior selectivity. two tuning meters, stereo indicator light, between-sta quieting on FM, MPX filter and tape outputs. Sensitiv 1.5 μV. Response: +0, −2 dB, 20-15,000 Hz. Harmonic tortion: less than 0.6%. Metal case with walnut end pa $5\frac{5}{32}$x$16\frac{5}{16}$x$11\frac{1}{32}$". 117 VAC. Japan.

13 A 2037 U. Shpg. wt., 24½ lbs. 24

Sherwood Stereo FM-AM Tuner has FETs and ICs

224^{5}
le
co

Shown in metal case

Model S-2300. Field effect transistor front-end and tegrated circuit IF strip assure superior sensitivity selectivity for superb FM; wideband AM too. Has st light, zero-center tuning meter, multiplex filter and in station muting on FM. Sensitivity: 1.8 μV. Distortion: dB. Optional case below. 4x14x10½". 115 VAC.

13 A 2495 U. Shpg. wt., 14 lbs. 22

13 A 2401 X. Leatherette Covered Metal Case. 5 lbs. . . . .

13 A 2427 X. Walnut Case. Wt., 7 lbs. 2

13 A 2470 U. S-3300. As above, less AM. 13 lbs. 19

**See page 438 for full Credit det*

TUNERS

EICO • DYNA
KENWOOD • CROWN
ELECTRO-VOICE

ıa tube-type Stereo FM Tuner . .
ıfessional quality at a low price

154^{95}

For Dyna in Kit Form See ıges 468-470 ı Kit Section

For Eico in Kit Form See pages 472-475 in Kit Section

FM-3A. Superbly engineered tuner features four pro- ve limiting IF stages and balanced wideband dis- ıator for static-free FM. Time-switching multiplex, ary driven knob, stereo indicator light and tuning mplify station selection. Dependable 10-tube circuit. ivity: 4 µV IHF. Separation: 30 dB. Harmonic tion: 0.5% at 100% modulation. Satin tone ex- l front panel with metal case. 4¼x13½x8". 117 VAC.
589 X. Shpg. wt., 13 lbs. **154.95**

Eico solid-state Stereo FM Tuner

139^{95}

Model 3200. Compact tuner delivers brilliant mono and stereo FM. Silicon transistors assure long life and stable performance. Has automatic stereo/mono FM switching, AFC, stereo indicator light and D'Arsonval tuning meter. Sensitivity: 2.4 µV IHF. Response: ±1 dB, 20-15,000 Hz. Selectivity: 45 dB. Image Rejection: 45 dB. Separation: 40 dB at 1000 Hz. Stylish vinyl-clad, walnut finish metal case. Size, 3½x12x8". 117 VAC.
13 A 2341 X. Shpg. wt., 7 lbs. **139.95**

enwood Stereo FM-AM Tuner has FETs

89^{95}

KT-1000. Budget priced tuner features field-effect- stor front end for low noise and high sensitivity. fine AM too. Five IF stages with three limiters and and ratio detector assure clean, noise-free reception. has time-switching multiplex, stereo indicator light, g meter and multiplex noise filter. Sensitivity: 3 µV Signal-to-Noise Ratio: −55 dB. Separation: better 22 dB at 1 kHz. Size, 4⅜x10¼x10⅞". For 110-120 From Japan.
044 U. Shpg. wt., 8½ lbs. 89.95

lectro-Voice solid-state Stereo FM Tuner

79^{90}

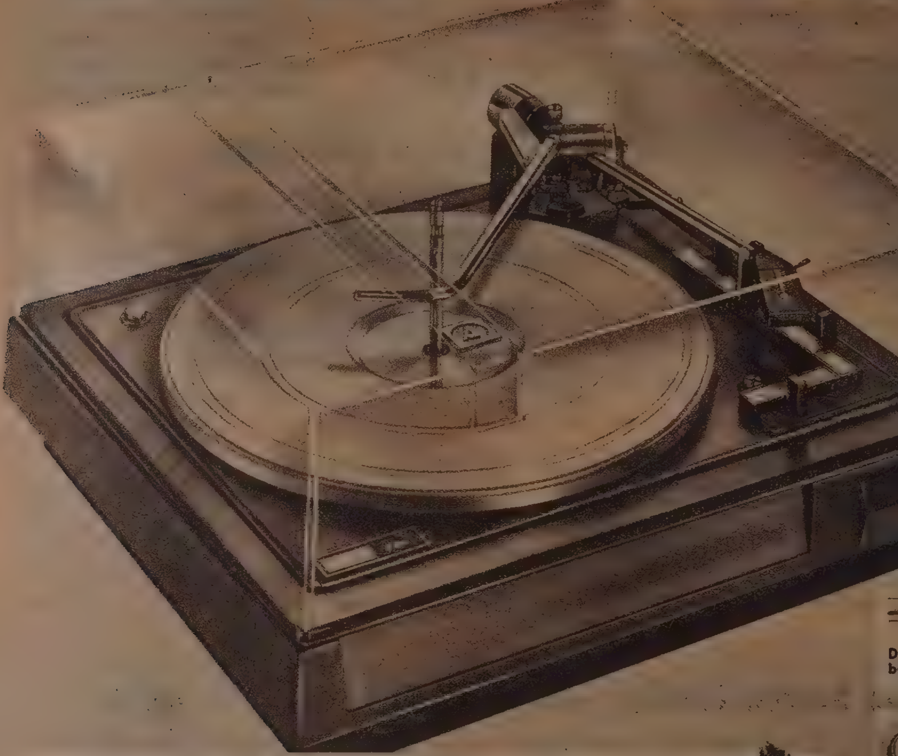
1159. Low priced tuner offers surprising performance. ıres automatic stereo/mono FM switching, stereo in- or light, flywheel driven tuning knob and large, easy- ıd slide rule dial. Sensitivity: 3 µV for 30 dB quieting. and Noise: −55 dB. Harmonic Distortion: 1%. l-to-Noise Ratio: 60 dB at 100% modulation. Sepa- ı: 35 dB at 400 Hz. With handsome walnut-finished case. Size, 4¼x15¾x8½". Ideal mate for the E-V stereo amplifier—see page 49. For 115 VAC.
2763 X. Shpg. wt., 16 lbs. 79.90

rown budget priced compact Stereo FM Tuner

59^{95}

FM-300. Here's a fine solid-state tuner at a rock ım price that almost anyone can afford. Features matic stereo/mono FM switching. Stereo indicator shows reception of stereo FM broadcast. Also has hable AFC and large, easy-to-read slide rule dial inpoint tuning accuracy. Front panel output level ol is combined with AC power switch. Has stylish walnut wood case. Fits anywhere—only 2⅜x11⅝x deep. For 117 VAC. From Japan.
2258 U. Shpg. wt., 5 lbs. 59.95

Our finest Allied® Stereo Turntable Package



SAVE $47.85 ON COMPLETE PACKAGE

Allied 929 Alone	Complete Package
69^{95}	74^{95}
$5 monthly*	$5 monthly*

YOU GET ALL THIS

plus choice of Stereo Cartridge

Empire 888E Reg. $39.95
Pickering V15/ATE-3 Reg. $39.95
Shure M93E Reg. $39.95

Deluxe base

Automatic Turntable precision-crafted in England

Model 929 Package. *Separately, $122.80.* Includes: Allied 929 4-speed stereo Automatic Turntable with Deluxe Base and Molded Styrene Dust Cover, *plus* your choice of Stereo Elliptical Cartridge. Superbly crafted automatic turntable has every important feature for finest performance—certain to please the most critical listener. Has 2 spindles for manual or automatic operation. Boasts dynamically-balanced low-mass tubular pickup arm, adjustable stylus pressure and anti-skating compensation. Precise cuing and pause control. "Pop" filter, muting. Flutter, less than .05%; wow, less than 0.12% rms. Choice of Empire 888E, Pickering V15/ATE-3 or Shure M93E stereo elliptical cartridge—**Specify.** Size, 13⅛x11¼". For 110-120 volts, 60 Hz AC.
14 A 0373 CDX. Shpg. wt., 20 lbs. 74.95

Allied 929 Automatic Turntable with Stereo Elliptical Cartridge for 1¢ More. *Separately, $109.90—Save $39.94.* Choice of Empire 888E, Pickering V15/ATE-3 or Shure M93E stereo elliptical cartridge—**Specify.** Order optional base, dust cover below.
14 A 0129 CDU. Shpg. wt., 11 lbs. 69.96

Allied 929 Automatic Turntable Alone.
14 A 5429 U. Shpg. wt., 11 lbs. 69.95

Ebony-Black Base with Walnut Insert.
14 A 5472 X. Shpg. wt., 3 lbs. 7.95

Mounting Board. For custom installations.
14 A 5614 X. Shpg. wt., 2 lbs. 1.95

Dust Cover. Transparent Styrene.
14 A 5453 X. Shpg. wt., 5 lbs. 4.95

45-rpm Automatic Spindle.
14 A 5454. Shpg. wt., 12 oz. 1.69

Dynamically counte
balanced pickup a

Extra-heavy cast,
balanced platter

Easy-mount
cartridge holder

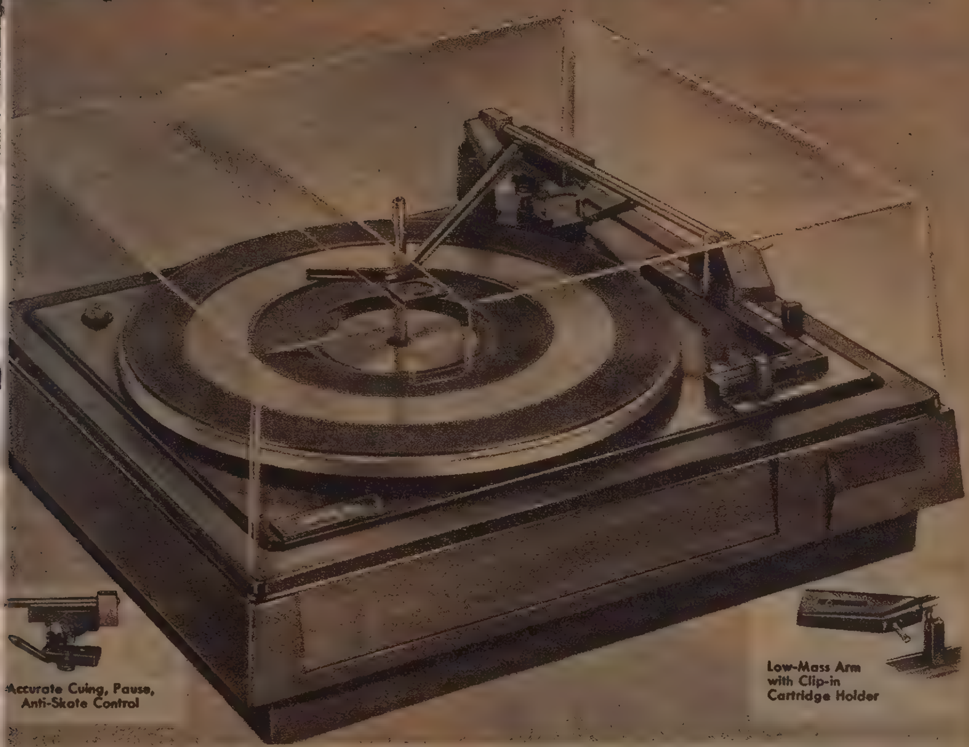
Stylus pressure
adjustment

Adjustable anti-
skating control

Automat
lock
secures
arm

**Full Credit details on page 438 . . Get your Turntable with no money do*

Complete Allied Stereo Turntable Package


Accurate Cuing, Pause, Anti-Skate Control
Low-Mass Arm with Clip-in Cartridge Holder

BUY THE COMPLETE PACKAGE AND GET BIG $47.85 SAVINGS

Allied 919

Deluxe base

YOU GET ALL THIS
plus choice of Stereo Cartridge

Empire 888E Reg. $39.95 | Pickering V15/ATE-3 Reg. $39.95 | Shure M93E Reg. $39.95

Allied 919 Alone	Complete Package
49.95	54.95
$5 monthly*	$5 monthly*

Dust cover

Automatic Turntable precision-crafted in England

odel 919 Package. *Separately, $102.80.* Includes: Allied 19 4-speed stereo Automatic Turntable with Deluxe ase and Molded Styrene Dust Cover, *plus* your choice f Stereo Elliptical Cartridge. Precision-made for exeptional performance and beautifully styled for attracve appearance. Plays single records manually, or stack f records automatically. Two spindles. Automatic termix of different size records.

ow-mass tubular aluminum pickup arm is counteralanced on friction-free ball-bearings. Accurate cuing nd pause control. Powerful 4-pole motor is resiliently ounted. Anti-skate control assures flawless tracking. Pop" filter, muting. Clip-in cartridge holder. Automatic hutoff after last record has played. Flutter, less than 5%; wow, less than 0.12% rms. Choice of Empire 888E, ickering V15/ATE-3 or Shure M93E stereo elliptical artridge—**Specify.** Size, 13⅛x8x11¼". For 110-120 volts, Hz AC.
4 A 0372 CDX. Shpg. wt., 18 lbs. **54.95**

Allied 919 Automatic Turntable with Stereo Elliptical Cartridge for 1¢ More. *Separately, $89.90—Save $39.94.* Choice of Empire 888E, Pickering V15/ATE-3 or Shure M93E stereo elliptical cartridge—**Specify.** Order optional base, dust cover below. Or, order mounting board for special custom installation.
14 A 0132 CDX. Shpg. wt., 9½ lbs. **49.96**

Allied 919 Automatic Turntable Alone.
14 A 5459 X. Shpg. wt., 9½ lbs. **49.95**

Ebony Black Base with Walnut Insert.
14 A 5472 X. Shpg. wt., 3 lbs. **7.95**

Mounting Board. For custom installations.
14 A 5614 X. Shpg. wt., 2 lbs. **1.95**

Dust Cover. Molded transparent Styrene.
14 A 5453 X. Shpg. wt., 5 lbs. **4.95**

45-rpm Automatic Spindle.
14 A 5454. Shpg. wt., 12 oz. **1.69**

Garrard Automatic Turntables with exclusiv

SL95B Features

Gyroscopically gimballed . . . arm floatsonneedlepivots

Single Cuing/ Pause Control . . viscous damped

Platform for 2-point record support in automatic play

Model SL95B

A

SL95
Alon

129

Elliptical Cartridge	Delux Ellipti
129^{51}	134

All models shown on optional base

Model
SL75B

B

SL75B
Alone

109^{50}

Elliptical Cartridge	Deluxe Elliptical
109^{51}	114^{50}

only
1¢
more

Elliptical-stylus Stereo Cartridge

Empire
888E
Reg. $39.95

Pickering
V15/ATE-3
Reg. $39.95

Shure
M93E
Reg. $39.95

only
$5
more

Deluxe Elliptical Stereo Cartridge

Empire
888TE
Reg. $49.95

Pickering
XV-15/AME
Reg. $49.95

Shure
M91E
Reg. $49.95

SL72 Features

Counterweight mounted in rubber to prevent pickup arm resonance

Single Cuing/ Pause Control . . viscous damped

Platform for 2-point record support in automatic play

C

Model
SL72B

SL72
Alon

89

Elliptical Cartridge	Delux Ellipti
89^{51}	94

See page 58 for optional bases, dust covers and accessori

nchro-Lab motor

Garrard's finest Automatic Turntable..for perfectionists

el SL95B. *Save $39.94.* Magnificent automatic table has every feature for flawless record . Synchro-Lab motor assures perfect record l accuracy. Pickup arm is fully damped dur- ning and automatic play to protect your ds and stylus. Adjustable counterweight. ision antiskating and stylus pressure gauges. s up to six records manually or automatical- $33\frac{1}{3}$, 45 or 78 rpm. Rotating center spindle, ize 12" platter and Auto-Rise® record orm. $15\frac{13}{16}$x$14\frac{5}{8}$". Req. $4\frac{3}{8}$" above, 3" be- mounting board. Choose Empire 888E, ering V15/ATE-3 or Shure M93E cartridge. 117 VAC. Shpg. wt., 13 lbs.
0950 CDU. Specify Cartridge.........129.51

B with Deluxe Elliptical Cartridge for $5 More. *$44.95.* Choose Empire 888TE, Pickering 15/AME or Shure M91E. 13 lbs.
0951 CDU. Specify Cartridge.........134.50

3114 U. SL95B Alone. Wt., 13 lbs.....**129.50**

95B with Empire 999VE for $25 more

95B with Empire 999VE Stereo rtridge. *Save $49.95.*
A 0952 DU. 13 lbs......**154.50**

Deluxe model with twin-braced pickup arm and 12" platter

el SL75B. *Save $39.94.* Features Synchro-Lab or for perfect speed accuracy. Has twin- ed low-mass pickup arm with adjustable nterweight and stylus force gauge. Auto- ® record platform. Plays up to six records ually or automatically at $33\frac{1}{3}$, 45 or 78 rpm. x$14\frac{9}{16}$". Req. $4\frac{3}{8}$" above, 3" below mounting d. Choose Empire 888E, Pickering V15/ E-3 or Shure M93E cartridge. 117 VAC. g. wt., 13 lbs.
0953 CDU. Specify Cartridge.........109.51

B with Deluxe Elliptical Cartridge for $5 More. *$44.95.* Choose Empire 888TE, Pickering -15/AME or Shure M91E. 13 lbs.
0954 CDU. Specify Cartridge.........114.50

3115 U. SL75B Alone. Wt., 13 lbs.....**109.50**

One of Garrard's newest..offers portant extras at a low price

del SL72B. *Save $39.94.* Automatic turntable ures Synchro-Lab motor for constant record ed, plus an improved low-mass tubular alumi- n pickup arm with adjustable counterweight, cision antiskating control and stylus pressure ge. Damped in both cuing and automatic y modes to protect your stylus and records. to-Rise® record platform treats your records h feather-like gentleness. Plays up to six ords manually or automatically at $33\frac{1}{3}$, 45 or rpm. $15\frac{13}{16}$x$14\frac{5}{8}$". Req. $4\frac{3}{8}$" above, 3" below unting board. Choose Empire 888E, Pickering /ATE-3 or Shure M93E elliptical cartridge. 117 VAC. Shpg. wt., 13 lbs.
A 0955 CDU. Specify Cartridge..........89.51

2B with Deluxe Elliptical Cartridge for $5 More. *$44.95.* Choose Empire 888TE, Pickering -15/AME or Shure M91E. 13 lbs.
A 0956 CDU. Specify Cartridge..........94.50

A 3118 U. SL72B Alone. Wt., 13 lbs......**89.50**

Garrard
SYNCHRONOUS SPEED

GARRARD'S EXCLUSIVE EXACT-SPEED MOTOR

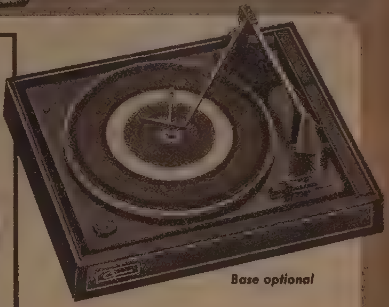
Synchro-Lab combines the power of an induction motor with the exact-speed accuracy of a fine synchronous motor for flawless turntable performance.

only 1¢ more

Empire 808E	Pickering V15/ACE-3	Shure M55E
Reg. $29.95	Reg. $29.95	Reg. $29.95

only $5 more

Empire 888E	Pickering V15/ATE-3	Shure M93E
Reg. $39.95	Reg. $39.95	Reg. $39.95



Base optional

Deluxe 4-speed model has damped cuing

Elliptical Cartridge
79^{51}
Deluxe Elliptical
84^{50}
SL65B Alone
79^{50}

Model SL65B. *Save $29.94.* Has Synchro-Lab motor, damped cuing, stylus force gauge, adjustable counterweight, antiskate, automatic intermix. Plays up to six records at $16\frac{2}{3}$, $33\frac{1}{3}$, 45 or 78 rpm. $15\frac{1}{8}$x$16\frac{2}{3}$". Req. $4\frac{3}{4}$" above, $2\frac{7}{8}$" below mtg. board. Empire 808E, Pickering V15/ACE-3 or Shure M55E. 117 VAC. 13 lbs.
13 A 0957 CDU. Specify Cartridge..........79.51

SL65B with Deluxe Elliptical Cartridge for $5 More. *Save $34.95.* Choose Empire 888E, Pickering V15/ATE-3 or Shure M93E. 13 lbs.
13 A 0958 CDU. Specify Cartridge..........84.50

13 A 3116 U. SL65B Alone. Wt., 13 lbs......**79.50**

only 1¢ more

Empire 808E	Pickering V15/ACE-3	Shure M55E
Reg. $29.95	Reg. $29.95	Reg. $29.95

only $5 more

Empire 888E	Pickering V15/ATE-3	Shure M93E
Reg. $39.95	Reg. $39.95	Reg. $39.95

Base optional

Budget-priced Garrard with 4 speeds

Elliptical Cartridge
59^{51}
Deluxe Elliptical
64^{50}
SL55B Alone
59^{50}

Model SL55B. *Save $29.94.* Has Synchro-Lab motor, automatic intermix and more. Plays up to six records manually or automatically. $16\frac{2}{3}$, $33\frac{1}{3}$, 45, 78 rpm. $14\frac{7}{8}$x$12\frac{3}{4}$. Req. $4\frac{3}{4}$" above, $2\frac{7}{8}$" below mtg. board. Empire 808E, Pickering V15/ACE-3 or Shure M55E. 117 VAC. 11 lbs.
13 A 0959 CDU. Specify Cartridge..........59.51

SL55B with Deluxe Elliptical Cartridge for $5 More. *Save $34.95.* Choose Empire 888E, Pickering V15/ATE-3 or Shure M93E. 11 lbs.
13 A 0960 CDU. Specify Cartridge..........64.50

13 A 3117 U. SL55B Alone. Wt., 11 lbs......**59.50**

rrard turntables are precision-crafted in England

Garrard Automatic and Manual Turntables

Order base below

only 1¢ more

Empire 80EE Reg. $24.95

Pickering P/ATE-1 Reg. $24.95

Shure M44E Reg. $24.95

only $5 more

Empire 808E Reg. $29.95

Pickering V15/ACE-3 Reg. $29.95

Shure M55E Reg. $29.95

Order base below

Four-speed Automatic Turntable

40B Alone	Elliptical Cartridge	Deluxe Ellipti Cartridge
44^{50}	44^{51}	49^{50}

Model 40B. *Save $24.94.* Features silent fou pole motor for exact 16⅔, 33⅓, 45 and 78 rp speeds. Has stylus pressure gauge, visco damped cuing and easy-to-use slide-in cartrid holder. Automatic or manual operation; tv spindles. 13⅞x12". Req. 4½" above, 2⅞" belo mtg. board. Choose Empire 80EE, Pickeri P/ATE-1 or Shure M44E. 117 VAC. Englan 10 lbs.

13 A 0963 CDU. Specify Cartridge..........44.

40B with Deluxe Elliptical Cartridge for $5 Mo *Save $24.95.* Choose Empire 808E, Pickeri V15/ACE-3 or Shure M55E. 10 lbs.

13 A 0964 CDU. Specify Cartridge..........49.

13 A 3120 U. 40B Alone. 10 lbs..........44.

Four-speed Manual Turntable

SP20B Alone	Elliptical Cartridge	Deluxe Ellipti Cartridge
37^{50}	37^{51}	42^{50}

Model SP20B. *Save $24.94.* This quality manu turntable features counter-balanced pickup ar which returns to rest after record is playe automatic end-of-record shutoff. Also has new designed tubular aluminum pickup arm wi stylus force adjustment and easy-to-use slide- cartridge holder. 14⅜x12½". Choose Emp 80EE, Pickering P/ATE-1 or Shure M44E. Wi 45-rpm adapter. 117 VAC. England. 10 lbs.

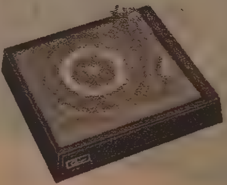
13 A 0965 CDU. Specify Cartridge..........37.

SP20B with Deluxe Elliptical Cartridge for $5 Mo *Save $24.95.* Empire 808E, Pickering V15/AC 3 or Shure M55E. 10 lbs.

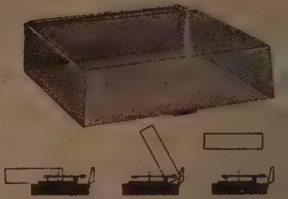
13 A 0966 CDU. Specify Cartridge..........42.

13 A 3121 U. SP20B Alone. 10 lbs..........37.

Garrard Turntable Bases, Dust Covers and Accessories



Coordinated bases with accessory trays are made of molded, simulated pin-seal leather and ebony with black and silver trim. Provision for easy mounting of slides if desired. "Power-Matic" bases turn off amplifier or receiver after last record is played. **Dust covers** are clear molded styrene. Special design lets you *slide* cover into place from front or *tilt up* and lock into place for loading or adjusting turntable. Can be left in place while playing. **Mounting boards** are sanded unfinished wood, 16x18".



Stock No.	Mfr's Type	Description	Wt.	EACH
13 A 3122 X	B-1	Base for SL65B, SL55B, 40B, 30 and SP20B.	5 lbs.	5.50
13 A 3123 X	B-2	Base for SL95B. SL75B and SL72B.	6 lbs.	6.50
13 A 3292 X	WB-2	Deluxe wood base for 95B, 75B, 72B	9 lbs.	19.95
13 A 3124 X	B-1P	Like B-1 Base, but with "Power-Matic" feature.	7 lbs.	14.95
13 A 3125 X	B-2P	Like B-2 Base, but with "Power-Matic" feature.	8 lbs.	15.95
13 A 3290 X	D-1	Dust cover for B-1 and B-1P bases.	5 lbs.	5.50
13 A 3291 X	D-2	Dust cover for B-2, DB-2 and B-2P bases.	5 lbs.	6.50
13 A 3060 X	MB10	Mounting board for SL65B, SL55B, 40B, 30 and SP20B	2 lbs.	2.25
13 A 3070 X	MB11	Mounting board for SL95B, SL75B, and SL72B.	2 lbs.	2.25
13 A 3078	FLRS35	45-rpm auto. spindle for SL65B, SL55B, 40B, 30, SLX-2, X10.	3 oz.	1.95
13 A 3076	LRS25	45-rpm auto. spindle for SL95B, SL75B, SL72B, SLX-3.	8 oz.	3.80
13 A 3079	F40	45-rpm auto. spindle for X-11	3 oz.	1.95
13 A 3077	C1	Slide-in cartridge clip for SL75B.	3 oz.	1.75
13 A 3089	C2	Slide-in cartridge clip for SL95B, SL72B, SL65B, SL55B, 40B, SP20B	3 oz.	1.75

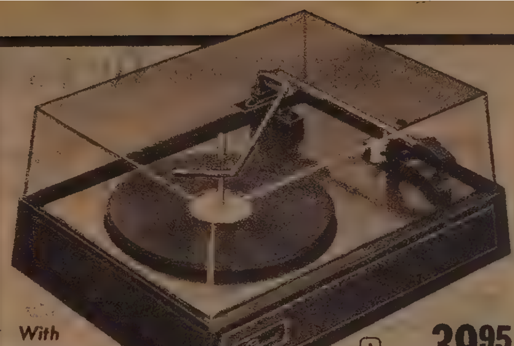
Buy your Garrard Turntable on Allied's Credit Fund Plan . . . see page 43

arrard Modules with ase, cover, cartridge

(A) Miniature Turntable Module

l X-11. Budget-priced automatic turntable you traditional Garrard quality in a very act package. Only 12x8½x6". Automatic nual operation at 16⅔, 33⅓, 45 or 78 rpm. matic intermix of up to six 10" and 12" ds. Balanced tubular aluminum pickup arm ects stylus and records. Automatic shutoff. premounted ebony pinseal base, ceramic o cartridge, diamond flip-over stylus, dust , 2 spindles. Optional F-40 45-rpm spindle 58. 117 VAC. England. 10 lbs.

3109 X.........................**39.95**



With ceramic cartridge

(A) 39^{95}

$5 monthly*

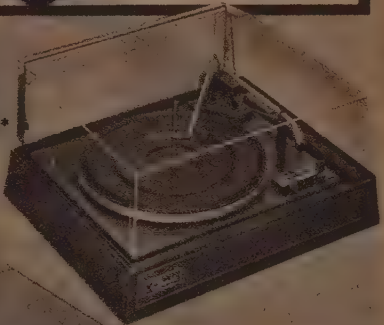
3-speed Automatic Turntable Module

l X-10. Precision-made automatic turntable res low-mass tubular aluminum pickup arm a single lever cuing/pause control to protect s and records. Automatic or manual opera- at 33⅓, 45 or 78 rpm. Simplified controls front" for record speed and size selection. mic stereo cartridge has flipover diamond s pre-set for correct stylus pressure. With y pinseal base, 3-position dust cover and spindles. Optional LRS25 45-rpm spindle page 58. 7¾x15x13¼". For 117 VAC. and. Shpg. wt., 17 lbs.

3110 X.........................**52.50**

With ceramic cartridge 52^{50} $5 monthly*

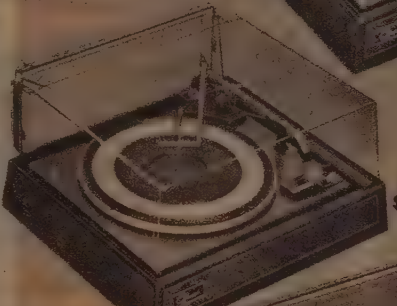
(B)



Deluxe Automatic Turntable Module

l SLX-2. Superb automatic turntable comes walnut and ebony pinseal base, dust cover premounted stereo magnetic cartridge with ond stylus. Has Synchro-Lab motor for ct 33⅓, 45 or 78 rpm speeds. Combined l and record size selector. Low-mass tubular inum pickup arm has cuing/pause control, stable counterweight and stylus pressure e. Automatic or manual operation. 7¾x15x ". Order FLRS35 45-rpm automatic spindle age 58. With long and short spindles. For VAC. From England. Shpg. wt., 17 lbs.

2679 X.........................**69.50**



(C)

69^{50} $5 monthly*

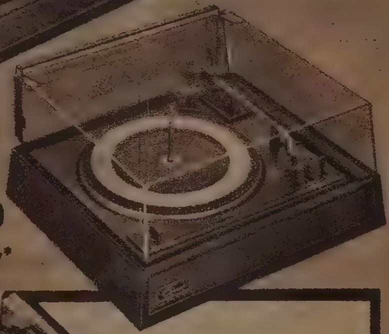
With magnetic cartridge

Finest Automatic Turntable Module

el SLX-3. Garrard's finest module features hro-Lab motor for perfect speed accur- Auto-Rise® platform protects records dur- automatic play. Low-mass tubular pickup has adjustable counterweight, stylus force antiskating gauges, and damped cuing dur- manual and automatic play. Automatic or ual play at 33⅓, 45 or 78 rpm. With ellipti- diamond stylus magnetic stereo cartridge, ounted ebony pinseal base and styrene dust r. LRS25 45-rpm spindle on p. 58. 7¾x15x ". 117 VAC. England. 22 lbs.

2683 X.........................**99.50**

(D)

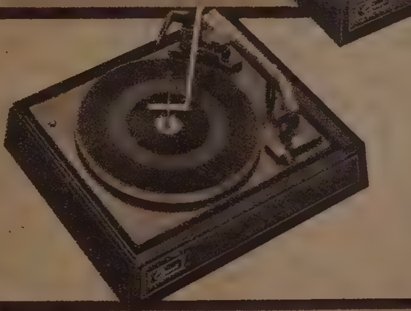


With magnetic cartridge 99^{50} $5 monthly*

Low-cost Automatic Turntable

Model 30. Garrard's lowest priced automatic urntable has oversize, weighted record plat- er and smooth, silent-running motor for 6⅔, 33⅓, 45 or 78 rpm speeds. Also has utomatic record intermix, automatic end- of-record shutoff, two spindles for manual or utomatic play, and ceramic stereo cartridge with diamond stylus. Size, 14 1/16x12¾". Order optional base, dust cover and 45-rpm pindle on page 58. For 117 VAC. From England. Shpg. wt., 10 lbs.

13 A 3167 X.........................**39.50**



With ceramic cartridge

39^{50}

$5 monthly*

Automatic Turntables by Dual . . all wit

only 1¢ more
Elliptical Stereo Cartridge

Empire	Pickering	Shure
888E	V15/ATE-3	M93E
Reg. $39.95	Reg. $39.95	Reg. $39.95

only $5 more
Deluxe Elliptical Cartridge

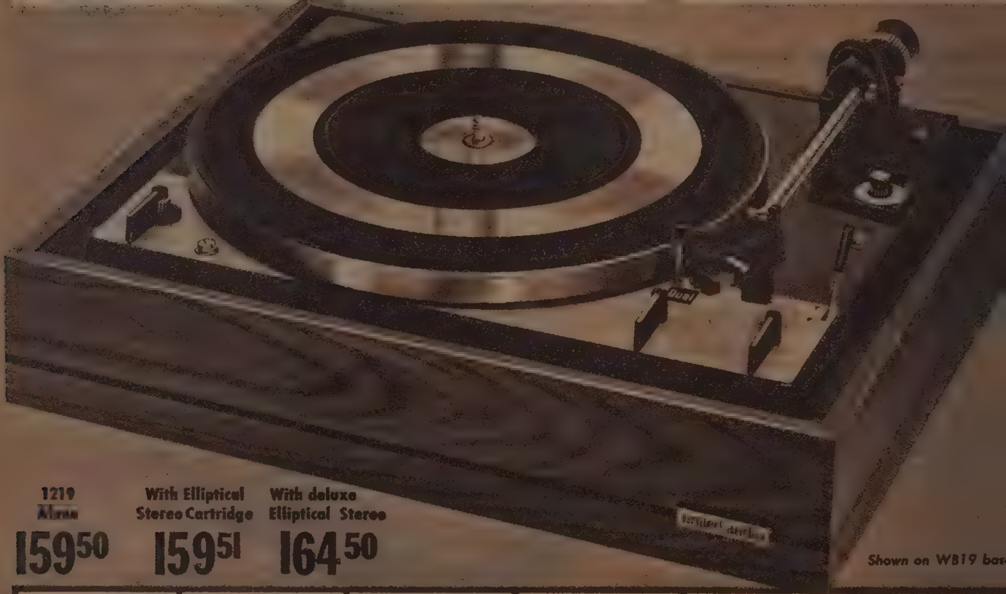
Empire	Pickering	Shure
888TE	XV15/400E	M91E
Reg. $49.95	Reg. $49.95	Reg. $49.95

1219 with Empire 999VE

Save $49.95

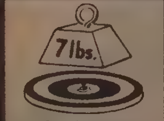
$25 more **$184^{50}$**

For connoisseurs. Dual 1219 with Empire's superb 999VE elliptical-stylus stereo cartridge.
13 A 0989 DU. Wt., 24 lbs. . . 184.50

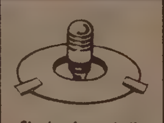


1219 Alone	With Elliptical Stereo Cartridge	With deluxe Elliptical Stereo
159^{50}	159^{51}	164^{50}

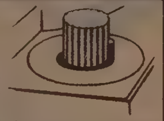
Shown on WB19 bas



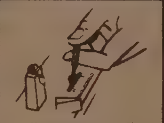
Full 12″ diameter dynamically balanced 7 lb. platter



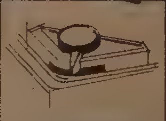
Single-play spindle rotates with record to prevent wear



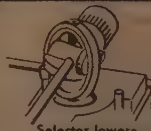
Separate anti-skating for conical and elliptical styli



"Feather touch" cue control with one-groove accuracy



6% variable pitch control for perfect speed



Selector lowers arm for perfect 15° stylus-tracking

Dual 1219 three-speed Automatic Turntable with money-saving cartridge offer

Save $39.94. Dual's best turntable has every deluxe feature to meet the demands of the most critical listener. Full 12″ dynamically balanced platter. Mode selector lowers arm base to provide perfect 15° stylus tracking (0° vertical tracking error) when set for single play, raises base for multiple play. Motor combines absolute speed accuracy with high torque. Has 6% variable pitch control for "tuning" records to synchronize with tape recorders or musical instruments.

Cue-control system silicone-damped in both directions to prevent bounce. Elastically damped counterbalance has 0.01 gram click stops for precision balancing. Adjustable stylus overhang. Automatic or manual operation at 33⅓, 45, 78-rpm. Multiple play spindle holds up to 6 records. 14$\frac{13}{16}$x12⅛″. Choice of Empire 888E, Pickering V15/ATE-3 or Shure M93E elliptical-stylus stereo cartridge. Order base, accessories at right. For 115 VAC. Imported.
13 A 0990 CDU. Specify Cartridge. Wt., 24 lbs. 159.51

1219 with Deluxe Elliptical Stereo Cartridge. *Save $44.9* Empire 888TE, Pickering XV15/400E or Shure M91
13 A 0991 CDU. Specify Cartridge. Wt., 18 lbs. . . . . . . 164.

13 A 3201 U. Model 1219 Alone. Shpg. wt., 18 lbs. . . . . 159.

DUAL TURNTABLE ACCESSORIES

13 A 3203 X. WB19 Walnut Base. For 1219. 5 lbs. . . . . . 14.
13 A 3204 X. DC9 Dust Cover. For WB19 above. 4 lbs. . . 12.

13 A 3206 X. WB12 Walnut Base. For Models 1209 and 121
Shpg. wt., 4 lbs. . . . . 10.
13 A 3289 X. WB93 Deluxe Oiled Walnut Base. For Mod
1209 and 1212. Shpg. wt., 5 lbs. . . . . 12.
13 A 3209 X. DC2 Dust Cover. For WB12, WB93. 3 lbs. 10.

13 A 3210 X. Model AS12 45-rpm Automatic Spindle. For
Dual models. Shpg. wt., 10 oz. 5.

13 A 3219 X. Model CH12 Extra Cartridge Holder. For
Dual models. Shpg. wt., 3 oz. . . . . 3.

SHIPPING NOTE: Items with suffix U, W or Z in stock no. sent tr or express. See Ordering Information pag

liptical-stylus stereo cartridge offers

ual 1209 with Cartridge Offer

1209 Alone	With Elliptical Stereo Cartridge	With deluxe Elliptical Stereo
19⁵⁰	119⁵¹	124⁵⁰

$39.94. Fine features at a moderate . Synchronous/hi-torque motor; low- tubular arm; flawless 0.5 gram track- pitch control. Auto or manual: 33⅓, 45, m. 12⅞x10¾". With 888E, V15/ATE-3 193E cartridge. Base, accessories p. 60. VAC. Imported. 15 lbs.
0992 CDU. Specify Cartridge........119.51
with Deluxe Elliptical Cartridge. *Save 5.* 888TE, XV15/400E, M91E. 15 lbs.
0993 CDU. Specify Cartridge......124.50
3202 U. 1209 Alone. 15 lbs....... 119.50

only 1¢ more

Empire	Pickering	Shure
888E	V15/ATE-3	M93E
Reg.	Reg.	Reg.
$39.95	$39.95	$39.95

only $5 more

Empire	Pickering	Shure
888TE	XV15/400E	M91E
Reg.	Reg.	Reg.
$49.95	$49.95	$49.95

Shown on W893 base

ual 1212 with Cartridge Offer

1212 Alone	With Elliptical Stereo Cartridge	With deluxe Elliptical Stereo
79⁵⁰	79⁵¹	84⁵⁰

to $29.94. Good performance at a low . Hi-torque motor; low-mass counter- nced arm; 1.0 gram tracking; pitch con- Auto or manual: 33⅓, 45, 78-rpm. x10¾". With 808E, V15/ACE-3 or E cartridge. Order base, accessories p. For 115 VAC. Imported. Wt., 14 lbs.
0926 CDU. Specify Cartridge.......79.51
with Deluxe Elliptical Cartridge. *Save 5.* 888E, V15/ATE-3, M93E. 14 lbs.
0929 CDU. Specify Cartridge.......84.50
3267 U. 1212 Alone. 14 lbs.........79.50

only 1¢ more

Empire	Pickering	Shure
808E	V15/ACE-3	M55E
Reg.	Reg.	Reg.
$29.95	$29.95	$29.95

only $5 more

Empire	Pickering	Shure
888E	V15/ATE-3	M93E
Reg.	Reg.	Reg.
$39.95	$39.95	$39.95

Shown on W812 base

Shown on walnut base

only 1¢ more

Empire	Pickering	Shure
888E	V15/ATE-3	M93E
Reg.	Reg.	Reg.
$39.95	$39.95	$39.95

only $5 more

Empire	Pickering	Shure
888TE	XV15/400E	M91E
Reg.	Reg.	Reg.
$49.95	$49.95	$49.95

Shown on walnut base

ELPA PE-2020 with Cartridge Offer

PE-2020 Alone		With Elliptical		Deluxe Elliptical	
	129⁹⁵		129⁹⁶		134⁹⁵

Save $39.94. Deluxe, for finest stereo. Anti-skate. Tracks to ¼ gram. 4 speeds auto or manual. 7¾ lb. platter. 888E, V15/ATE-3 or M93E cartridge. 14¹⁄₁₆x 12". Base, accessories below. 115 VAC. Imported.
13 A 0387 CDU. Specify Cartridge. 20 lbs...........129.96
PE-2020 with "Lighter-Tracking" Deluxe Cartridge. *Save $44.95.* Choose 888TE, XV15/400E or M91E.
13 A 0384 CDU. Specify Cartridge. 20 lbs...........134.95
13 A 3273 U. Model PE-2020 Alone. 20 lbs.........129.95
13 A 3261 X. Deluxe Walnut Base. Wt., 3 lbs.........7.00
13 A 3237 X. Dust Cover. Wt., 1 lb....................5.95
13 A 3242. 45-rpm Automatic Spindle. 3 oz..............5.95
13 A 3241. Extra Cartridge Holder. 3 oz.................5.95

ELPA PE-2018 with Cartridge Offer

PE-2018 Alone		With Elliptical		With Deluxe Elliptical	
	99⁹⁵		99⁹⁶		104⁹⁵

Save $39.94. Smaller version of PE-2020. Pitch control; 15° vert. tracking adjustment. 3 speeds auto or manual. With 888E, V15/ATE-3 or M93E cartridge. 13x10¾". Base, accessories below. 115 VAC. Imported.
13 A 0994 CDU. Specify Cartridge. 18 lbs............99.96
PE-2018 with "Lighter-Tracking" Deluxe Cartridge. *Save $44.95.* Choose 888TE, XV15/400E or M91E.
13 A 0995 CDU. Specify Cartridge. 18 lbs...........104.95
13 A 3240 U. Model PE-2018 Alone. 18 lbs............99.95
13 A 3235 X. Vinyl-Covered Walnut Base. 5 lbs.......7.00
13 A 3225 X. Dust Cover. Wt., 2 lbs....................7.00
13 A 3222. 45-rpm Automatic Spindle. 4 oz.............4.95
13 A 3241. Extra Cartridge Holder. 3 oz................5.95

Miracord Turntables with cartridge offer

only 1¢ more

Empire 888E $39.95 | Pickering V15/ATE-3 $39.95 | Shure M93E $39.95

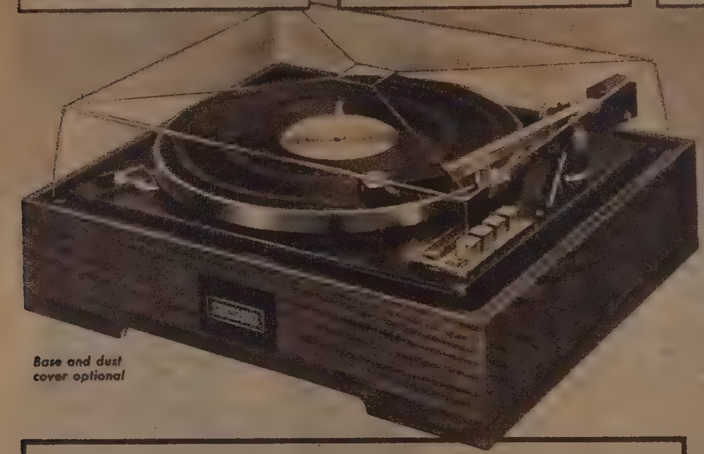
only $25 more

Save $49.95. Empire's 999VE super-elliptical stereo cartridge

only $40 more

Base
Dust Cover
Empire 1000VE

Save $79.90. Base, dust cover, Empire's 1000VE super deluxe elliptical cartridge



Base and dust cover optional

With Stereo Elliptical Cartridge	With Super-Elliptical Cartridge	With Base, Dust Cover, Empire 1000ZE Cartridge
159^{51}	184^{50}	199^{50}

Top-of-the-line Automatic Turntable with cartridge

Model PW50H. Features hysteres motor and full-size 12" platter. Pus button operation. Automatic or ma ual. Anti-skating, damped cuin Balanced pickup arm. Speeds: 16 33⅓, 45 or 78 rpm. 14½x12 Empire 888E, Pickering V15/ATE or Shure M93E only 1¢ more—speci Accessories below. 115 VAC. Importe

13 A 0400 CDU. Wt., 20 lbs.....159.

PW50H With Empire 999VE Cart.
13 A 0402 CDU. 20 lbs..........184.

Package: PW50H, base, dust cov super deluxe Empire 1000VE Cartrid
13 A 0996CD3U. Wt., 25 lbs....199

13 A 3256 U. PW50H Alone. 20 lbs. 159

MIRACORD ACCESSORIES

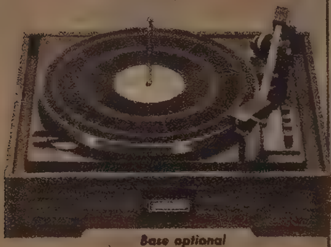
13 A 3262 X. RB-5 Molded Base. F PW50H, 750. 3 lbs...............5.

13 A 3263 X. RB-6 Molded Base. F model 620. 3 lbs...............5.

13 A 3268 X. DC1 Dust Cover. For models. Wt., 2 lbs...............4.

13 A 3193. CR50 Extra Cartridge Mou For PW50H, 750. 3 oz...............5.

13 A 3195. CR20 Extra Cartridge Mou For 620, 3 oz...............3.



Base optional

only 1¢ more

Empire 888E $39.95 | Pickering V15/ATE-3 $39.95 | Shure M93E $39.95

only $5 more

Empire 888TE $49.95 | Pickering XV15/400E $49.95 | Shure M91E $49.95

Full-feature 4-speed Automatic Turntable

Model 750 Alone 139^{50} With Elliptical Cartridge 139^{51} With Deluxe Elliptical 144^{50}

Model 750. Includes many of the features of deluxe Model PW50H. Heavy-duty 4-pole motor and full 12" platter for smooth and steady performance. Speeds: 16⅔, 33⅓, 45, 78 rpm. Precise damped cuing. Empire 888E, Pickering V15/ATE-3 or Shure M93E for 1¢ more—specify. Accessories above. 115 VAC. Imported. 14½x12½.

13 A 0997 CDU. 18 lbs. *Specify Cartridge*...............139.51

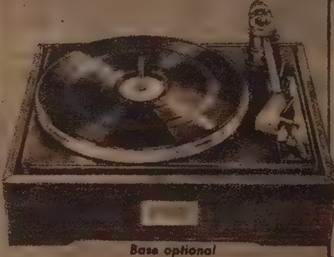
13 A 0998 CDU. 750 With Deluxe Elliptical. 888TE, XV15/400E or M91E. 18 lbs. *Specify Cartridge*...............144.50

13 A 3180 U. Model 750 Alone. 18 lbs...............139.50

With 999VE Super-Elliptical Cartridge

only $25 more

13 A 0999 CDU. For the extra-critical audiophile. 18 lbs 164.50



Base optional

only 1¢ mor

Empire 888E $39.95 | Pickering V15/ATE-3 $39.95 | Shu M93 $39.

only $5 mor

Empire 888TE $49.95 | Pickering XV15/400E $49.95 | Shu M9 $49.

Budget-priced 4-speed Automatic Turntab

Model 620 Alone 99^{50} With Elliptical Cartridge 99^{51} With Deluxe Elliptical 104

Model 620. For those who want Miracord quality craf manship at a lower price. Exclusive light touch pus button operation. Precise damped cuing for easy sele tion of any point on the record. Anti-skate. Balanc four-pole induction motor. Dynamically balanced to arm. Heavy, pressure-formed turntable platter. All fo speeds. Empire 888E, Pickerng V15/ATE-3 or Shu M93E only 1¢ more—specify. Accessories above. 1 VAC. 13⅜x11⅝. Imported.

13 A 0415 CDU. 15 lbs. *Specify Cartridge*...........99.

13 A 0416 CDU. 620 With Deluxe Elliptical. 888T XV15/400E, M91E. 15 lbs. *Specify Cartridge*...104.

13 A 3146 U. Model 620 Alone. 15 lbs...............99.

R McDonald and Allied® Stereo Turntables

only 1¢ more

Empire 808E $29.95	Pickering V15/ACE-3 $29.95	Shure M55E $29.95

only $5 more

Empire 888E $39.95	Pickering V15/ATE-3 $39.95	Shure M93E $39.95

Bases optional

600 e	With Elliptical Cartridge	With Deluxe Elliptical
50	74^{51}	79^{50}

Model 400 Alone	With Elliptical Cartridge	With Deluxe Elliptical
49^{50}	49^{51}	54^{50}

top-of-the-line 4-speed Automatic Turntable

00. Offers cuing and pause control. Perfectly counter-
ced low-mass tubular aluminum pickup arm. Adjust-
nti-skate compensation. Full-size heavy cast turntable
r. 13⅛x11¼". Req. 4" above, 2½" below mtg. board.
re 808E, Pickering V15/ACE-3 or Shure M55E 1¢
—specify. Optional base below. 115 VAC.
0105 CDU. Shpg. wt., 14 lbs. *Specify Cartridge*...74.51

00 With Deluxe Elliptical Cartridge for $5 more. Empire
, Pickering V15/ATE-3 or Shure M93E.
0106 CDU. Shpg. wt., 14 lbs. *Specify Cartridge*...79.50
3050 U. Model 600 Alone. Wt. 14 lbs............74.50

Low-priced BSR 4-speed Automatic Turntable

BSR 400. Excellent four-speed model features cuing for protection of cartridge and record. Jamproof low-mass pickup arm. Anti-skate adjustment. Automatic or manual. 13⅛x11¼". Requires 4" above, 2½" below mtg. board. Empire 808E, Pickering V15/ACE-3 or Shure M55E for 1¢ more**—specify.** Optional base below. 115 VAC.
13 A 0109 CDU. Shpg. wt., 12 lbs. *Specify Cartridge*...49.51

400 with Deluxe Elliptical Cartridge for $5 more. Empire 888E, Pickering V15/ATE-3, Shure M93E**—specify.**
13 A 0121 CDU. Shpg. wt., 12 lbs. *Specify Cartridge*...54.50
13 A 3011 U. Model 400 Alone. Wt. 12 lbs............49.50

R McDonald Accessories

3052 X. PB-1 Power-Matic Base.
shutoff. 2½ lbs.........15.00

3051 X. WB-6 Deluxe Base.
walnut veneer. Recessed,
oped top. 5 lbs.........12.00

3057 X. PB-2 Base. Ebony.
r, walnut accents. 3 lbs..6.00

3113. AS-2 45-rpm Automatic
dle. Shpg. wt., 8 oz.........2.25

ed Dust Covers. Usable while
table is playing. Deluxe: vinyl
ut, silver trim. 2¾ lbs.
3093 X. Deluxe DC-3.....7.00
3090 X. DC-2.............5.00

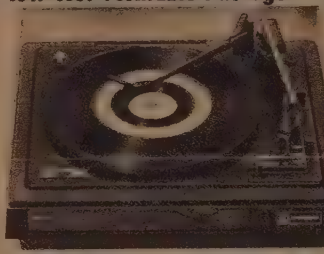
3055 X. MB-2 Mounting Board.
nished. 15⅞x15⅞". 2 lbs. 2.25

BSR McDonald introduces low-cost Turntable Package

Package includes: BSR 300 4-speed Automatic Turntable with Base, Dust Cover, and Shure M75 Magnetic Stereo Cartridge. Features jamproof, low-mass aluminum pickup arm. Anti-skate control. Automatic shutoff.

Dynamically balanced, resiliently mounted, 4-pole motor has constant-speed design to prevent flutter and wow. Automatic or manual. Takes 7", 10" or 12" records.

All four speeds: 16⅔, 33⅓, 45 and 78 rpm. Overall size: 15¼x13$\frac{7}{16}$x 6⅝". For 117 volts, 60 Hz AC.
13 A 3177 X. Wt. 12 lbs.....44.50



44^{50} **Includes turntable, base, dust cover, magnetic cartridge**

llied low-priced 4-speed Automatic Changer with stereo cartridge

llied 480. Stereo automatic changer offers
xcellent quality at a low, low price. Plays
tack of six 12", 10" or 7" records automatical-
y, mixes 12", 10", 7" sizes of same speed.
Automatic shutoff. Lightweight pickup arm
ffers excellent tracking for low record wear.
Flip-over ceramic stereo cartridge. Dual
synthetic-sapphire needles play any stereo or
mono record.

Nine-inch platter. All four speeds: 16⅔,
33⅓, 45 and 78 rpm. 13$\frac{3}{16}$x12". Requires
4½" above, 1¾" below mounting board.
With cartridge, audio cables. Order base, 45-
rpm automatic spindle, below. For 115 volts,
60 Hz AC. Shpg. wt., 11 lbs.
14 A 5460 X.....................19.95
14 A 5471 X. Walnut Base. 3 lbs........4.95
14 A 5463. 45-rpm Spindle. 8 oz.........1.29

19^{95} less base

Popular hi-fi magnetic Stereo Cartridges

Your component stereo phono system is only as good as your Cartridge!

Playback of stereo records is complicated by the high groove velocities and complex sounds recorded on today's records. Modern records demand better-tracking cartridges because the cartridge is the first link in the playback process and it must be free of distortion for you to get true hi-fi sound from your amplifier and speaker systems. All cartridges offered below are capable of precision-tracking when installed and maintained properly. Each is a good value and has a full frequency response for wonderful stereo realism.

Special Purchase!

21^{95}

Empire Deluxe Elliptical

Model 888SE. Allied's special purchase makes this low price possible. For manual and automatic turntables. Has 15° .0003" x .0007" elliptical diamond stylus. 6-32,000 Hz. Sep., 30 dB. Comp., 25x10^{-6} cm/dyne. 1 to 3 grams. Wt., 4 oz.
13 A 3991 S 21.95

A

Empire's Finest—
1000VE

C

Deluxe
999VE
888VE

888TE
888E
888P
888

B

808E
80EE
808

D

ADC Stereo Cartridges

ADC's finest Cartridge

59^{50}

Model 10E MK II Elliptical. Boasts 15° .0003x.0007" diamond stylus. Response, 10-20,000 Hz. Compliance, 35x10^{-6} cm/dyne. Separation, 30 dB. Tracks from ½ to 1½ grams. Shpg. wt., 4 oz.
13 A 3834 S....................59.50

Deluxe Cartridge

49^{50}

Model 550E Elliptical. Features "induced magnet" for minimum distortion. 15° .0003"x.0007" elliptical diamond stylus. 10-20,000 Hz. Comp., 28x10^{-6} cm/dyne. Separation, 30 dB. Tracks from ¾ to 2½ grams. 4 oz.
13 A 3833 S....................49.50

ADC Economy Cartridges

Model 990E Elliptical. For automatic and manual turntables. Has 15° .0003"x.0007" diamond stylus. 10-18,000 Hz. 18x10^{-6} cm/dyne. Sep., ½ to 4 grams. Wt., 4 oz.
13 A 3840 S....................29.50

Model 220E Conical. Features 15° .0007" conical-tip diamond stylus. Response, 10-18,000 Hz. Comp., 15x10^{-6} cm/dyne. Separation, 20 dB. Tracks from 2 to 5 grams. 4 oz.
13 A 3967 S....................19.50

Empire magnetic Stereo Cartridges

A **Model 1000VE Elliptical.** Empire's newest and finest! Allows no foreign noises, has perfect magnetic balance. Has 15° .0002"x.0007" elliptical diamond stylus. Frequency response, 6-40,000 Hz. Output, 5 mV per channel. Channel separation, 30 dB. Compliance, 35x10^{-6} cm/dyne. Tracks ¼-1¼ grams. Wt., 3 oz.
13 A 3883 S....................100.00

B **Model 888TE Elliptical.** Widely acclaimed for top performance. Ideal for manual and automatic turntables. Has 15° .0002"x.0007" elliptical diamond stylus. 8-32,000 Hz. Output, 6.0 mV. Sep., 32 dB. Comp., 30x10^{-6} cm/dyne. Tracks from ½ to 1½ grams. Wt., 4 oz.
13 A 3964 S....................49.95

B **Model 888E Elliptical.** For fine manual and automatic turntables. 15° .0004"x.0009" elliptical diamond stylus. Response, 10-30,000 Hz. Output, 8.0 mV per channel. Separation, 30 dB. Compliance, 28x10^{-6} cm/dyne. Tracks ¾-3 grams.
13 A 3992 S. Wt., 4 oz..........39.95

D **Model 808E Elliptical.** Has 15° .0004"x.0009" elliptical diamond stylus. Response, 10-25,000 Hz. Output, 8.0 mV per channel. Stereo channel separation, 30 dB. Compliance, 20x10^{-6} cm/dyne. ¾ to 4 grams. Shpg. wt., 4 oz.
13 A 3969 S....................29.95

D **Model 80EE Elliptical.** Has 15° .0004"x.0007" stylus. 20-20,000 Hz. Separation, 25 dB. 1¾-4 grams.
13 A 3825 S. Wt., 6 oz..........24.95

C **Model 999VE Elliptical.** Top qual
for the perfectionist. Has .00
x .0007" diamond stylus. 6-35,
Hz. Output, 5.0 mV per chann
Comp., 35x10^{-6} cm/dyne. Sep.,
dB. Wide tracking force range fr
½ to 1½ grams. Wt., 4 oz.
13 A 3976 S....................74

C **Model 888VE Elliptical.** Lo
priced version of famed 999V
Has .0002"x.0007" diamond styl
6-32,000 Hz. Output, 5.0 mV
channel. Compliance, 32x10^{-6} c
dyne. Separation, 32 dB. Tra
from ½ to 1¾ grams. Wt., 4
13 A 3977 S....................59

B **Model 888P Conical.** Reprodu
the entire musical range w
preciseness and clarity. 15° .00
conical-tip diamond stylus. 10-28,
Hz. Output, 8.0 mV per ch. Se
better than 30 dB. Comp., 15x1
cm/dyne. ½ to 4 grams. Wt., 4
13 A 3986 S....................29

B **Model 888 Conical.** Performs
mirably in manual and automa
turntables. Has 15° .0007" coni
tip diamond stylus. Response,
25,000 Hz. Output, 8.0 mV per
Sep., 30 dB. Comp., 20x10^{-6} c
dyne. ¾ to 4 grams. Wt., 4 oz.
13 A 3985 S....................24

D **Model 808 Conical.** Has .00
conical-tip diamond stylus.
sponse, 15-25,000 Hz. Output,
mV per channel. Sep., 30 dB. Co
pliance, 10x10^{-6} cm/dyne. Tra
from 1 to 5 grams. Shpg. wt., 4
13 A 3982 S....................19

14^{55}

Sonotone ceramic Cartridge

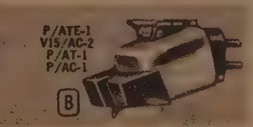
Model 9TAFHC-D77V Conical. Ceramic c
tridge matches magnetic inputs. Has d
.0007" diamond styli. 20-20,000 Hz. Com
15x10^{-6} cm/dyne. Sep., 30 dB. Tracks fr
1½ to 4 grams. Shpg. wt., 9 oz.
13 A 3823 S....................14

Allied stocks a complete line of name brand cartridg

Pickering hi-fi magnetic Stereo Cartridges

ALL PICKERINGS HAVE SNAP-IN BRACKETS—NO MOUNTING TOOLS REQUIRED

AME-3
ATE-3
ACE-3
AM-3
AT-3
AC-3
A



“XV” Series

XV-15/750E
XV-15/400E
XV-15/200E
XV-15/150
XV-15/100

Superb V and P Series Pickering Cartridges

15/AME-3 Elliptical. 15° 003"x.0009" diamond sty- 10-25,000 Hz. 32 dB sep. ½ grams. Brush. 3 oz.
3890 S. 44.95

15/ATE-3 Elliptical. Has 004"x.0009" diamond sty- 10-23,000 Hz. Sep., 32 dB. rams. Brush. 3 oz.
3892 S. 39.95

15/ACE-3 Elliptical. Has 004"x.0009" diamond sty- 10-20,000 Hz. Sep., 26 dB. grams. Brush. 3 oz.
3929 S. 29.95

15/AM-3 Conical. Has 007" conical-tip diamond s. 10-23,000 Hz. Sep. 32 dB. grams. Brush. 3 oz.
3893 S. 34.95

5/AT-3 Conical. Has 007" conical-tip diamond s: Response, 10-23,000 Hz. , 32 dB. 2-5 grams. 3 oz.
3894 S. 29.95

A **V15/AC-3 Conical.** Has .0007" conical-tip diamond stylus. 10-20,000 Hz. Sep., 26 dB. 3-7 grams. Brush. 3 oz.
13 A 3897 S. 24.95

B **P/ATE-1 Elliptical.** .0005"x .0010" diamond stylus. 10-20,000 Hz. 26 dB sep. Tracks 3-5 grams. Brush. Wt., 3 oz.
13 A 3901 S. 24.95

B **V15/AC-2 Conical.** Has .0007" diamond stylus. Response, 20-20,000 Hz. Separation, 26 dB. Tracks 3-7 grams. 3 oz.
13 A 3844 S. 21.95

B **P/AT-1 Conical.** Features .0007" conical tip diamond stylus. Response, 20-15,000 Hz. 2-5 grams. Wt., 3 oz.
13 A 3917 S. 19.95

B **P/AC-1 Conical.** Has .0007" conical tip diamond stylus. Response, 20-15,000 Hz. Tracks 3-7 grams. Wt., 3 oz.
13 A 3918 S. 17.95

XV-15/750E Deluxe Elliptical. For automatic and manual turntables. Light tracking .0002"x.0009" elliptical diamond stylus. Response, 10-25,000 Hz. Separation 35 dB. ½ to 1 gram. Shpg. wt., 3 oz.
13 A 3851 S. 60.00

XV-15/400E Deluxe Elliptical. Extra-light tracking. .0003"x.0009" elliptical diamond stylus. 10-25,000 Hz. 35 dB sep. Tracks from ¾ to 1½ grams. Record cleaning brush. Wt., 3 oz.
13 A 3980 S. 49.95

XV-15/200E Elliptical. Light tracking .0004"x .0009" elliptical diamond stylus. Response, 10-25,000 Hz. Separation, 35 dB. Tracks from 2 to 4 grams. Cleaning brush. 3 oz.
13 A 3983 S. 44.95

XV-15/150 Conical. Has .0007" tip diamond stylus. Response, 10-25,000 Hz. Separation, 35 dB. Tracks from 2 to 5 grams. With record cleaning brush. Shpg. wt., 3 oz.
13 A 3990 S. 34.95

XV-15/100 Conical. Low priced cartridge ideal for record changers. Features .0007" spherical stylus. Output, 8.0 mV per channel. 10-20,000 Hz. 3 to 7 grams. Shpg. wt., 3 oz.
13 A 3889 S. 29.95

Shure “Dynetic” magnetic Stereo Cartridges

15 Type 11. Bi-radial 002"x.0007" diamond s. 20-25,000 Hz. Over B sep. ¾-1½ grams. kability at 1 gram, m/sec at 1000 Hz. g. wt., 6 oz.
3886 S. 67.50

44E Elliptical. Features 004"x.0007" elliptical nond stylus. Frecy response, 20-20,000 Separation, 25 dB. e tracking force range 1¾ to 4 grams. Wt.,
3887 S. 24.95

75-6 Conical. Hi track 006" conical stylus. uency response, 20-00 Hz. Separation, 25 Tracks from 1½ to 3 s. 6 oz.
3865 S. 24.50

7/N21D Conical. 007" conical diamond us. Frequency re-nse, 20-20,000 Hz. aration, 20 dB. Tracks to 2½ grams. 3 oz.
3915 S. 17.95

D **M55E Elliptical.** 15° .0002"x.0007" diamond stylus. Frequency response, 20-20,000 Hz. Separation, 25 dB. Tracks from ¾ to 1½ grams. Shpg. wt., 6 oz.
13 A 3827 S. 29.95

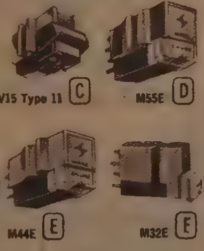
F **M32E Elliptical.** Fine, low-cost cartridge with .0004"x.0007" diamond stylus. Response, 20-17,000 Hz. Compliance, 10x10-⁶ cm/dyne. Separation, 20 dB. Tracks from 2 to 5 grams. 3 oz.
13 A 3879 S. 29.50

H **M44-7 Conical.** Retractable needle. 15° .0007" diamond stylus. 20-20,000 Hz. Separation, 25 dB. Tracks from 1½ to 3 grams. Shpg. wt., 6 oz.
13 A 3820 S. 19.95

H **M44C Conical.** Has 15° .0007" conical-tip diamond stylus. Frequency response, 20-20,000 Hz. Separation, 25 dB. Tracks 3-5 grams. Wt., 4 oz.
13 A 3934 S. 17.95

3D Conical. Ever-popular economy cartridge. Has 007" conical diamond stylus. Response, 20-15,000 20 dB sep. Tracks from 3 to 6 grams. Wt., 6 oz.
3900 S. 12.95

Elliptical Cartridges



Conical Cartridges

G
H
M75-6
M44-7
M44C
J
K
M7/21D
M3D

Hi-Track Series

M91E
M92E
M93E

M91E Elliptical Cartridge

Bi-radial .0002"x.0007" diamond stylus. 20-20,000 Hz. 25 dB sep. Tracks from ¾ to 1½ grams. Trackability at 1 gram; 28 dm/sec at 1 kHz. Wt., 6 oz.
13 A 3872 S. 49.95

M92E Elliptical Cartridge

Bi-radial .0002"x.0007" diamond stylus. Response, 20-20,000 Hz. Separation, 25 dB. Tracks from ¾ to 1½ grams. Trackability; 26 cm/sec at 1 kHz. Shpg. wt., 6 oz.
13 A 3873 S. 44.95

M93E Elliptical Cartridge

Provides exceptional performance in automatic or manual turntables. Bi-radial .0004"x .0007" diamond stylus. Response, 20-20,000 Hz. Separation, 25 dB. Tracks from 1½ to 3 grams. Shpg. wt., 6 oz.
13 A 3874 S. 39.95

cartridges on these pages have standard mounting centers

Manual Turntables with Cartridge Offers

only 1¢ more
80EE
$24.95
P/ATE-1
$24.95
M44E
$24.95

only $5 more
888E
$39.95
V15/ATE-3
$39.95
M93E
$39.95

Famous AR "XA" Turntable Outfit with Cartridg

With Elliptical Cartridge
78^{01}

Deluxe Elliptical Cartridge
83^{00}

XA Alone
78^{00}

Save $24.94. Superb turntable has belt drive f exact 33⅓, 45-rpm speeds. Viscous-damped 1 arm. Synchronous motor. 3½-lb. platter. Tur table includes base, dust cover. Empire 80E Pickering P/ATE-1 or Shure M44E ster cartridge 1¢ more—**specify.** 5¼x16¾x12½". F 115 VAC.
13 A 0932 CDU. Shpg. wt., 20 lbs..........78.

XA with Deluxe Elliptical Cartridge. *Save $34.9* Empire 888E. Pickering V15/ATE-3, or Shu M93E—**Specify Cartridge.**
13 A 0393 CDU. Shpg. wt., 20 lbs..........83.
13 A 3119 U. XA Alone. Wt., 20 lbs..........78.

Save $59.90

Empire
999VE
Stereo
Elliptical
Cartridge

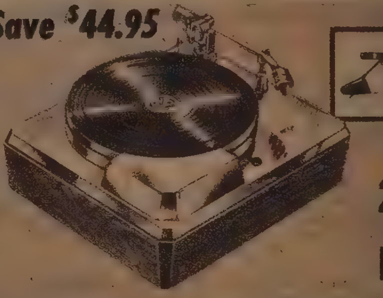
With Base, Dust Cover, Cartridge
249^{95}

Alone
199^{95}

Empire 598 with Base, Dust Cover, Cartridge

Separately $309.85. Has new arm for cartridges tracking low as ¼ gram. Hysteresis synchronous motor has belt drive to turn massive flywheel—largest ever in a home turntable—and 10-lb. platter for low rumble of −90 dB. Pneumatic suspension will absorb dancing and even jumping. Very low wow and flutter. Chrome finish. 8⅛x17½x 15⅛". With walnut base. dust cover, 999VE stereo elliptical cartridge. 115 VAC.
13 A 0968 L2U. Shpg. wt., 30 lbs..........249.95
13 A 2139 U. 598 Alone. Shpg. wt., 26 lbs..........199.95
13 A 2140 X. Base and Dust Cover. Wt., 14 lbs..........34.95

Save $44.95



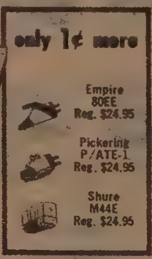
Empire
999VE
Stereo
Elliptica
Cartridg

With 999VE
219^{95}

Alone
189^{95}

Empire 398A-G Turntable with 999VE Cartrid

Separately $264.90. Deluxe outfit with walnut b and Empire's finest stereo elliptical cartridge. Turntabl hysteresis motor on isolated suspension boasts belt-drive turn 6-lb. balanced aluminum platter for vibration-f performance. Balanced arm has anti-skating and f suspension for perfect tracking at lowest pressure— justable from 0-8 grams. Top-of-plate belt positioning 33⅓, 45, or 78 rpm. Rich satin-gold finish. Size, 7½x17x1 For 115 VAC.
13 A 0418 DU. Shpg. wt., 28 lbs..........219
13 A 2257 U. 398A-G Alone. Wt., 28 lbs..........189

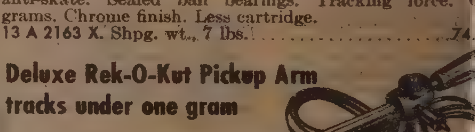


With Cartridge
67^{96}

B-62 Alone
67^{95}

Bogen Manual Turntable with Stereo Cartridge

Model B-62. *Save $24.94.* Precision manual turntable has click-stop variable speed control for all four speeds. Counterweighted arm with cuing control protects your records and stylus. Size, 15¼x13¼". Optional base below. Choose Empire 80EE, Pickering P/ATE-1 or Shure M44E stereo elliptical cartridge. For 115 VAC. Imported.
13 A 0399 CDU. Specify Cartridge. Wt., 23 lbs..........67.96
13 A 3277 X. B-62 Alone. Wt., 23 lbs..........67.95
13 A 3278 X. PB7 Walnut Base. Wt., 3 lbs..........8.25
13 A 3221 X. COV-1 Dust Cover. Wt., 2 lbs..........8.25

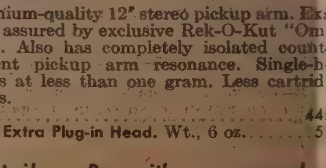


74^{95}

Empire 990 Pickup Arm tracks low as ¼ gran

Designed for new low-tracking-force cartridges. Provic full stereo balance front and back. Cuing lever, variat anti-skate. Sealed ball bearings. Tracking force. (grams. Chrome finish. Less cartridge.
13 A 2163 X. Shpg. wt., 7 lbs..........74.

Deluxe Rek-O-Kut Pickup Arm tracks under one gram



44^{95}

Model S-320. Premium-quality 12" stereo pickup arm. Ex lateral balance is assured by exclusive Rek-O-Kut "Om Balance" feature. Also has completely isolated count weight to prevent pickup arm resonance. Single-h mounting. Tracks at less than one gram. Less cartrid Shpg. wt., 2½ lbs.
13 A 3020 X...........44
13 A 3024. PS-20L Extra Plug-in Head. Wt., 6 oz..........5

Replacement Styli and Record Packages

Manufacturer's exact-replacement Styli for stereo hi-fi cartridges

de by manufacturer to dupli-
cate the original stylus . .
cision-manufactured to insure
exact performance . .
ide selection to fit most popular
stereo cartridges

Replacement styli (needles) made by the original cartridge manufacturer, so performance exactly duplicates the original stylus. These are exact replacements for exact performance. When you need a replacement stylus be sure of top quality by selecting from this list. Selection includes styli from the most popular cartridge manufacturers for their most popular models. "For" column indicates cartridges.

Choose the exact-replacement Stylus for your stereo cartridge

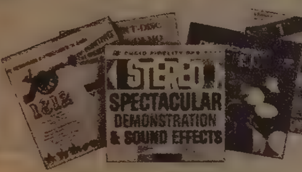
ck No.	Mfr.	Needle Type	Size	For	EACH
3836 S	Shure	VN2E	Ellipt.	V-15	25.00
3231 S	Shure	VN15E	Ellipt.	V-15 Type II	27.00
3318 S	Shure	N32E	Ellipt.	M32E	14.50
3808 S	Shure	N99	.0007"	M99 Series	12.95
3837 S	Shure	N44-5	.0005"	M44-5	11.00
3838 S	Shure	N44-7	.0007"	M44-7, M98/A	9.75
3923 S	Shure	N21-D	.0007"	M7, M3/N21D	11.00
3839 S	Shure	N55E	Ellipt.	M55E, M80 Series	14.95
3920 S	Shure	N3D	.0007"	M3D, M7D, M8D	7.95
3862 S	Shure	N44C	.0007"	M44C	9.00
3312 S	Shure	N44E	Ellipt.	M44E	12.50
3828 S	Shure	N91E	Ellipt.	M91E	24.50
3829 S	Shure	N92E	Ellipt.	M92E	22.50
3842 S	Shure	N93E	Ellipt.	M93E	19.50
3850 S	Shure	N75-6	Ellipt.	M75-6	11.35
3866 S	Pick.	PD07/C	.0007"	P/AC-1	9.15
3336 S	Pick.	PDE	Ellipt.	PAT/E	14.95
3843 S	Pick.	D1500AME-2	Ellipt.	V15/AME-1, 2	19.90
3305 S	Pick.	D1500AME-3	Ellipt.	V15/AME-3	24.95
3306 S	Pick.	D1500ATE-3	Ellipt.	V15/ATE-3	22.50
3308 S	Pick.	D1507AT-3	.0007"	Pick. V15/AT-3	13.75
3309 S	Pick.	D1500ATE-2	Ellipt.	V15/ATE-2	17.90
3863 S	Pick.	D1507AT-2	.0007"	V15/AT-2, −1; KLH V15/AT-1, HAT, HAT-2, and HBAT-2; Scott V15/AT-2	10.95
3319 S	Pick.	D1500ACE-3	Ellipt.	V15/ACE-3	20.40
3320 S	Pick.	PD07/T	.0007"	P/AT	9.90
3805 S	Pick.	D3807ATG	.0007"	38ATG Series	12.00
3321 S	Pick.	4500AME	Ellipt.	XV/15AME,450E	26.95
3322 S	Pick.	4507AM	.0007"	XV15/AM, 350	22.95
Stock No.	**Mfr.**	**Needle Type**	**Size**	**For**	**EACH**
13 A 3323 S	Pick.	4500ATE	Ellipt.	XV15/ATE, 200E	24.95
13 A 3324 S	Pick.	4507AT	.0007"	XV15/AT, 150	14.95
13 A 3303 S	Pick.	4507AC	.0007"	XV15/AC, 100	12.40
13 A 3334 S	Pick.	D1507AM-2	.0007"	V15/AM-2, Scott V15/AM-2	12.25
13 A 3335 S	Pick.	D1507AC-2	.0007"	V15/AC-2, −1; Bogen V15/AC-2; Fisher V15/AC-1	9.95
13 A 3908 S	Empire	S880P-6RD	.0006"	880P	12.95
13 A 3845 S	Empire	S880PE-ERD	Ellipt.	880PE	18.95
13 A 3906 S	Empire	S880-7RD	.0007"	880	9.95
13 A 3859 S	Empire	S888P-6RD	.0006"	888P	13.95
13 A 3860 S	Empire	S888PE-ERD	Ellipt.	888PE	15.95
13 A 3861 S	Empire	S888-7RD	.0007"	888	10.95
13 A 3337 S	Empire	S80EE-ERD	Ellipt.	80EE	14.95
13 A 3232 S	Empire	S888E-ERD	Ellipt.	888E	17.45
13 A 3304 S	Empire	888SE-ERD	Ellipt.	888SE	22.45
13 A 3325 S	Empire	S808E-ERD	Ellipt.	808E	14.95
13 A 3326 S	Empire	S808-7RD	.0007"	808	10.95
13 A 3328 S	Empire	S888TE-ERD	Ellipt.	888TE	24.95
13 A 3806 S	Empire	S888VE-ERD	Ellipt.	888VE	29.95
13 A 3329 S	Empire	S999VE-ERD	Ellipt.	999VE	36.95
13 A 3338 S	Empire	S1000VE-ERD	Ellipt.	1000ZE	47.50
13 A 3330 S	ADC	R12-E	Ellipt.	10E, 10E MK II	22.50
13 A 3847 S	ADC	R-4/E	Ellipt.	Point-Four-E	25.00
13 A 3849 S	ADC	R-770	.0007"	770	10.00
13 A 3331 S	ADC	R20	.0007"	220	7.00
13 A 3807 S	ADC	R-5/E	Ellipt.	550E	18.00
13 A 3809 S	ADC	R-9/E	Ellipt.	990E	12.00
13 A 3332 S	Grado	BTR/S	.0007"	BTR	7.50
13 A 3333 S	Grado	BTE/S	Ellipt.	BTE	12.50

ecord Packages for spectacular stereo sound

ORGAN SPECTACULAR

George Wright's "Organ Spectacular" **15⁸⁸**

n magnificent organ records in an
citing, money-saving collection.
u'll thrill to stirring stereo high
elity music. Titles include: The
orge Wright Sound; Showtime;
orge Wright Plays the Mighty
urlitzer Organ; The Roaring 20's;
ve Organ Will Travel; Command
rformance; Encores, Vol. II: The
nius of George Wright; Original
eet and Low; others. 5 lbs.
A 2022 EX. 15.88



Famous 5-record "Stereo Launcher" **7⁷⁹**

Discover the full dynamics of your stereo hi-fi system. Five-record set helps you set up your system; they're great entertainment too. Stereo LP records include spectacular sound effects, percussion instruments, powerful classical music, popular big-band music, and original Hollywood film sound tracks. Provides almost 3½-hours of glorious listening pleasure. Shpg. wt., 4 lbs.

13 A 3215 EX. 7.79

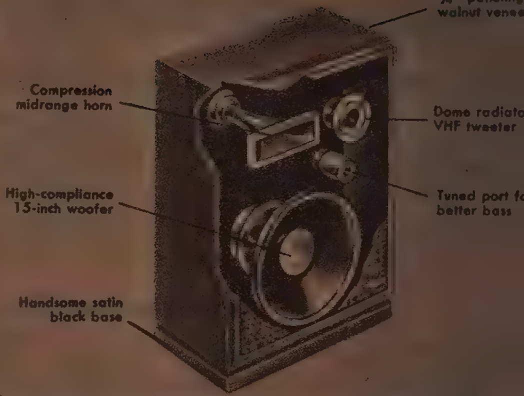
LIBRARY OF
SOUND
EFFECTS

Fascinating sound effects in stereo **9⁹⁵**

A broad, categorized assortment of sounds, familiar and unusual, recorded in spectacular stereo for truly exciting listening and emotional impact. Five-record set includes sounds of surf, ocean liners at sea, jet engines, percussion instruments, tropical birds, roaring lions and over a hundred others. Perfect for special effects in home movies, sound tracks or editing into tapes. Wt., 4 lbs.

13 A 2146 EX. 9.95

Big 15" woofer, horn midrange and dome radiator tweeter . . all in a beautiful cabinet for use on shelf or floor


¾" paneling
walnut venee
Compression midrange horn
Dome radiato
VHF tweeter
High-compliance 15-inch woofer
Tuned port f
better bass
Handsome satin black base

Our finest Allied® hi-fi Speaker System

149^{95} $8 monthly*

Three superb hi-fi speakers plus precision-engineered enclosure with luxurious walnut veneer finish and handsome sculptured moldings make this Speaker System an amazing value!

Model 2385. Our finest Allied speaker syste
offers features and superb hi-fi sound whic
you will not find anywhere else at this pric
Powerful 15" woofer has cloth-roll suspensic
for high compliance and long cone excursion
necessary for bass that you can actually fee
Giant 5¼-lb. magnet structure and 1½" voic
coil assure distortion-free bass down to th
lowest pipe-organ frequencies.

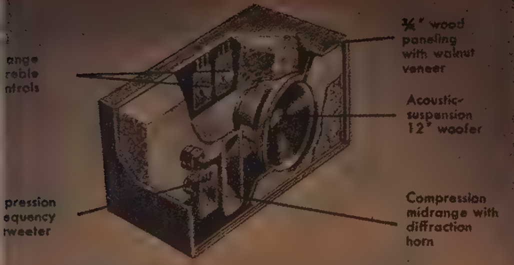
Die-cast, horn-loaded compression-type mic
range speaker features large magnet structur
and 1" voice coil. Provides high-efficiency an
smooth, clear midrange sound from 2000 t
10.000 Hz. Wide-dispersion dome radiato
tweeter sounds brilliant treble tones fron
10,000 Hz to beyond audibility. Built-in elec
trical crossover network divides the audi
range at 1000 and 8000 Hz. Tweeter, midrang
controls on rear of cabinet.

Solid ¾" hardwood enclosure has handsom
walnut veneer finish on all four sides an
stylish sculptured moldings. Fiberglass insula
tion prevents annoying resonances. Tastefull
accented grille cloth will blend with almos
any decorating scheme. Can be placed hori
zontally on bookshelf or vertically on floor wit
flush-grooved satin black base included. Care
fully handcrafted for lasting beauty. Powe
capacity. 100 watts peak. 30¼x20½x14".
20 A 9715 Z. Shpg. wt., 70 lbs. **149.9**

SPECIFICATIONS

Frequency Response: 20 Hz to beyond audi
range. *Woofer:* 15" high compliance; cloth-rol
suspension; 5¼-lb. magnet structure; 1½
voice coil for excursions of up to 1⅝". Flux
6975 gauss. Free-air resonance, 16 Hz. Response, 20-2000 Hz. *Midrange:* die-cast, horn-loaded compression-type; 4-oz. magnet structure. 1" voice coil. Flux, 8100 gauss. Response.
2000-10,000 Hz. *Tweeter:* dome radiator; 9-oz.
magnet structure. 1" voice coil. Flux; 12,20
gauss. Response; 10,000 Hz to beyond audibility. *Crossovers:* 1000 Hz and 8000 Hz. *Capacity:* 50 watts; 100 watts peak. *Impedance:*
8 ohms.

**Buy with low monthly payments . . details on page 438*


ange
reble
ntrols
¾" wood paneling with walnut veneer
Acoustic-suspension 12" woofer
pression
equency
tweeter
Compression midrange with diffraction horn

Kit form

99^{95}

$5 monthly

see page 438

Assembled

129^{95}

$7 monthly

see page 438

Best Allied® bookshelf acoustic-suspension system . . with horn midrange and tweeter

ASSEMBLE IT YOURSELF AND SAVE $30.00

Three-way 12-inch acoustic-suspension Speaker System Kit for magnificent high-fidelity sound

12" acoustic-suspension woofer for powerful bass, plus a horn midrange and a horn tweeter make this our best Allied bookshelf system . . truly professional performance

odel 2370K. You could pay more for a bookshelf speaker system, d still not get sound that will give you more satisfying listening. eavy-duty 12" acoustic-suspension woofer pours out deep bass low as 20 Hz. Compression-type midrange with diffraction rn delivers the important middle frequencies with a realism at brings music to life. High-frequency tweeter, also with a fraction horn, gives you wide-dispersion, bell-like tones for a ore precise "stereo image." Two level controls at rear of enclore permit easy adjustment of midrange and tweeter volume for rsonalized response. Kit includes everything for easy assembly in e evening, using just a screwdriver. With walnut finishing oil d easy-to-follow, fully illustrated instructions. Size, 14x25x13" ep. Shpg. wt., 50 lbs.

A 9729 Z. Kit Form 99.95
A 9730 Z. Model 2370. Factory Assembled and Finished 129.95

SPECIFICATIONS

Overall Frequency Response: 20 Hz to beyond audio range.

Woofer: 12" acoustic-suspension high-compliance, with 3½-lb. magnet structure. Flux, 6000 gauss. 2" 4-layer voice coil. Frequency response, 20-1000 Hz.

Midrange: compression-type with diffraction horn, 6-oz. magnet structure, 1" voice coil. Flux, 7000 gauss. 1000 to 5000 Hz.

Tweeter: compression-type with diffraction horn, 13-oz. Alnico V magnet structure, 1" voice coil. Flux, 9000 gauss. Responds to beyond audio range.

Power Capacity: 35 watts, 70 watts peak.

Crossovers: 1000 and 5000 Hz.

Voice Coil Impedance: 8 ohms.

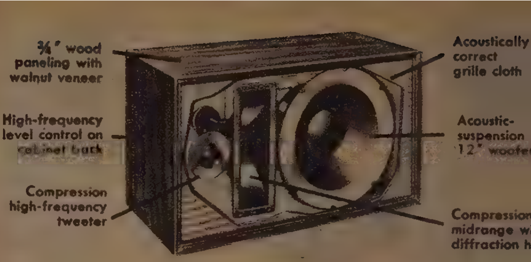
Controls: two level—adjust tweeter and midrange.

Enclosure: solid ¾" wood paneling with walnut veneer.

HIPPING NOTE: All items with suffix U, W or Z in stock no. sent truck or express. See Ordering Information pages.

Allied three-way 12" acoustic-suspension bookshelf Speaker System . . priced low

ASSEMBLE IT YOURSELF AND SAVE $25.00


¾" wood paneling with walnut veneer
High-frequency level control on cabinet back
Compression high-frequency tweeter
Acoustically correct grille cloth
Acoustic-suspension 12" woofe
Compression midrange wi diffraction h

Kit form 74.95

$5 monthly
see page 438

Assembled 99.95

SPECIFICATIONS

Overall Frequency Response: 25 to over 20,000 Hz.

Woofer: 12" acoustic-suspension, high-compliance, cloth-roll with 6¾-lb. ceramic magnet structure. Flux, 12,000 gauss. 2" voice coil. Response, 25-2500 Hz.

Midrange: compression driver with wide-dispersion diffraction horn. 6-oz. Alnico V magnet structure. Flux, 8500 gauss. ¾" voice coil. Response, 2500-10,000 Hz.

Tweeter: compression-type, with 6-oz. Alnico V magnet structure and ¾" voice coil. Response, 10,000 Hz to beyond 20,000 Hz.

Crossovers: L-C at 1000 Hz and 10,000 Hz.

Power Capacity: 30 watts, 60 watts peak.

Voice Coil Impedance: 8 ohms.

Control: tweeter balance.

Overall Size: 14x25x13½" deep.

Material: ¾" wood with walnut veneer and sculptured molding.

Three-way 12-inch acoustic-suspension Speaker System Kit with midrange diffraction horn

Even at our thrifty price you get acoustic-suspension for deep bass down to 25 Hz, plus compression tweeter and compression midrange horn for response beyond 20,000 Hz

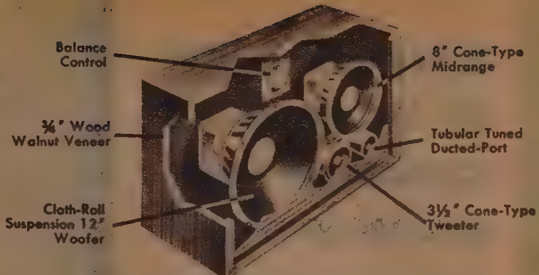
Model 2300CK. Only at Allied can you get an acoustic-suspensio system of this quality with handsome sculptured molding at suc a low price! Powerful 12" acoustic-suspension woofer feature cloth-roll suspension with massive 6¾-lb. magnet structure an 2" voice coil for thundering bass down to 25 Hz. Compressio midrange with diffraction horn for smooth wide-dispersion sound Compression-type tweeter offers clean response to beyond 20,00 Hz. Crossovers at 1000 Hz and 10,000 Hz. Tweeter balance contro at rear of cabinet permits adjustment of high-frequency respons to suit individual room acoustics. Fiberglass insulated. For vertica or horizontal placement. Only a screwdriver is needed to assembl the kit. With detailed, easy-to-follow instructions and walnu finishing oil. Size, 14x25x13½". Shpg. wt., 49 lbs.

20 A 9762 U. Kit Form 74.9
20 A 9761 U. Model 2300C. Factory Assembled and Finished .. 99.9

SHIPPING NOTE: Items with suffix U, W or Z in stock no. sent truc or express. See Ordering Information page

Allied three-way 12" Speaker System with tuned ducted-port bass reflex enclosure

ASSEMBLE IT YOURSELF AND SAVE $20.00



Kit form **59.95** $5 monthly see page 438 **Assembled** **79.95**

SPECIFICATIONS

Overall Response: 30-18,000 Hz.

Woofer: 12". 2¼-lb. Alnico V magnet structure, cloth-roll suspension. 1½" copper voice coil. Response, 30-2000 Hz.

Midrange: 8" cone-type. 4-oz. Alnico V magnet structure. 1" voice coil. Response, 2000 to 5000 Hz.

Tweeter: 3½" cone-type. 6-oz. Alnico V magnet structure. $\frac{5}{16}$" voice coil. Response, 5000-18,000 Hz.

Crossovers: electrical, 2000 and 5000 Hz.

Power Capacity: 30 watts, 60 watts peak.

Voice Coil Impedance: 8 ohms.

Control: tweeter balance, at rear.

Enclosure: tubular-tuned ducted-port bass reflex-type with fiberglass insulation to prevent resonance.

Overall Size: 14½x24x10" deep.

Material: ¾" wood paneling with walnut veneer finish, sculptured molding.

High-performance three-way Speaker System Kit with powerful cloth-roll-suspension 12" woofer

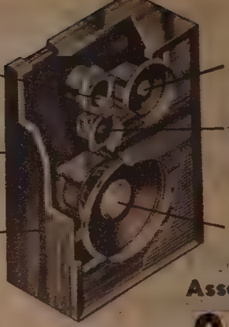
You can't beat this speaker system for value . . big 12" woofer and cone-type midrange and tweeter units provide 30-18,000 Hz response that covers full orchestral range

Model 2330AK. Here's more proof that an Allied speaker system gives you more value for your money. Three separate speakers are matched to give you superb music reproduction. Husky high-compliance 12" cloth-roll suspension woofer for smooth bass down to 30 Hz. Cone-type 8" midrange speaker delivers clear mid-frequencies. Cone-type 3½" tweeter provides sparkling treble response up to 18,000 Hz. Tweeter balance control permits adjustment to room acoustics and your taste. Enclosure is ¾" wood with walnut finish and sculptured molding, and custom woven grille cloth. Fiberglass-lined to prevent annoying spurious resonance. Kit easily assembles in just a few hours with only a screwdriver. With all parts, instructions and walnut finishing oil. Size, 14½x 24x10". Shpg. wt., 33 lbs.

20 A 9709 U. Kit Form	**59.95**
20 A 9720 U. Model 2330A. Factory Assembled and Finished	**79.95**

Lowest-priced Allied® 12" System Kit . . 3 speakers and ducted port for great hi-fi

ASSEMBLE IT YOURSELF AND SAVE $20.00



Kit form

44^{95}

$5 monthly
see page 438

Assembled

64^{95}

SPECIFICATIONS

Overall Response: 35-17,000 Hz.

Woofer: 12" high-compliance with 1¾ lb. Alnico V magnet structure. Flux, 10,200 gauss. 1¼" voice coil. Response, 35-400 Hz.

Midrange: 6" cone-type. 12-oz. Alnico V magnet structure. Flux, 9400 gauss. ¾" voice coil. Response, 400-5000 Hz.

Tweeter: 3½" cone-type direct-radiator. 6-oz. Alnico V magnet structure. Flux, 8200 gauss. 9⁄16" voice coil. Response, 5000 to 17,000 Hz.

Crossovers: electrical at 400 and 5000 Hz.

Power Capacity: 30 watts, 60 watts peak.

Voice Coil Impedance: 8 ohms.

Enclosure: Bass reflex-type with tubular-tuned port and fiberglass insulation to prevent resonance.

Cabinet Material: ¾" wood finished with oiled walnut veneer.

Control: tweeter level on back.

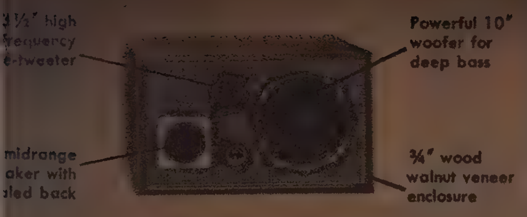
Three-way 12" Speaker System Kit combines spec acoustic design with handsome walnut styl

Here's our lowest priced Allied system kit that has a powerfu 12" woofer . . hear solid 35-Hz bass, and treble response to 17,000 Hz . . a best buy for audiophiles on a budget

Model 3030BK. Enjoy full-range hi-fi reproduction and luxuri styling with this popular speaker system. Features 12" wo for resounding bass down to 35 Hz. Highly efficient 6" midra speaker provides smooth coverage of the important middle quencies. Special-design 3½" direct-radiator tweeter dispe sparkling highs. Balance control at rear of cabinet permits adju ment of tweeter response. Acoustic insulation prevents resona Has ¾" wood enclosure with walnut finish, beautiful sculptu molding, and cane grille cloth that matches walnut finish. Can assembled in less than one hour with just a screwdriver. Then back—enjoy great hi-fi—and count your savings! With pa instructions and finishing oil. 14½x24x9". Shpg. wt., 28 lbs.

20 A 9743 U. Kit Form. 44
20 A 9745 U. Model 3030B. Factory Assembled and Finished. . . .64

SHIPPING NOTE: Items with suffix U, W or Z in stock no. sent or express. See Ordering Information pa



Lowest Priced Allied Speaker System Kit has 3-way design with 10" woofer

ASSEMBLE IT YOURSELF AND SAVE $15.00

Kit form 34^{95}

$5 monthly*

Assembled 49^{95}

lel 3017K. Imagine the thrill of assembling a three-way speaker em that looks and sounds as good as this! And you pocket big .00 savings when you "do it yourself." Allied has made it so easy t all you have to do is follow the clearly illustrated instructions in practically no time at all the job is done. No special tools are iired—all you need is a screwdriver. Even the finishing oil is uded for rubbing in a handsome professional-looking walnut finish.

s three-way speaker system features a big 10-inch woofer with ky $1\frac{3}{4}$ pound ceramic magnet structure coupled to a large ch four-layer copper-wire voice coil for smooth, peak-free bass can feel. Sturdy $\frac{3}{4}$-inch wood enclosure is a bass reflex type with ision tuned ducted-port which permits deep, natural bass re- ase down to 40 Hz.

cient 6-inch cone type speaker with $3\frac{1}{4}$-ounce Alnico V magnet cture and $\frac{3}{4}$-inch voice coil delivers pure midrange sound be- en 800 Hz and 5000 Hz. Features sealed back to prevent annoying, dent sound due to intermodulation with the woofer. Specially gned $3\frac{1}{2}$-inch cone tweeter with 2-ounce Alnico V magnet cture and $\frac{9}{16}$-inch voice coil provides brilliant, sparkling treble onse up to 17,000 Hz. Built-in capacitor type electrical crossover work divides system response at 800 Hz and 5000 Hz for the othest possible sound.

od enclosure has handsome walnut veneer with attractive, ustically transparent cane grille cloth which will complement decor. Kit includes all parts, finishing oil and detailed instruc- is. Shpg. wt., 22 lbs. Sent truck or express.

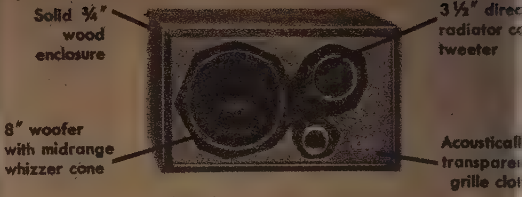
\ 9742 U. Kit Form..34.95

\ 9741 U. Model 3017. Factory Assembled and Finished........49.95

SPECIFICATIONS

Overall System Frequency Response: 40-17,000 Hz. *Woofer:* 10-inch cone with $1\frac{3}{4}$ pound ceramic magnet structure. Flux density: 8600 gauss. Four-layer copper-wire voice coil with 1-inch diameter. Frequency response: 40-800 Hz. *Midrange:* 6-inch cone type with sealed back to prevent intermodulation with woofer. $3\frac{1}{4}$-ounce Alnico V magnetic structure with 6200 gauss flux density. $\frac{3}{4}$-inch diameter copper-wire voice coil. Frequency response: 800-5000 Hz. *Tweeter:* $3\frac{1}{2}$-inch cone type with 2-ounce Alnico V magnet structure. Flux density: 4800 gauss. $\frac{9}{16}$-inch diameter copper-wire voice coil. Frequency response: 5000-17,000 Hz. *Crossover Network:* built-in electrical capacitor type, with crossovers at 800 and 5000 Hz. *Power Handling Capacity:* 20 watts program, 40 watts peak. *System Impedance:* 8 ohms nominal. *Enclosure Design:* bass reflex type with tuned ducted port. *Material:* $\frac{3}{4}$-inch wood with five-ply walnut veneer and $\frac{1}{2}$-inch-thick fiberglass acoustic insulation. Acoustically transparent cane grille cloth. *Overall Size:* 12x22x8″ deep.

Our lowest priced Allied bookshelf Speaker System... 8" woofer has heavy magnet for good bass


Solid ¾" wood enclosure
8" woofer with midrange whizzer cone
3½" direc radiator co tweeter
Acousticall transparer grille clot

24^{95}

$5 monthly*

Ideal for compact stereo sys or wherever limited space is major problem

Excellent choice for piping beautiful hi-fi music into any room in your home

Sturdy construction and smar styling will delight even the fussiest buyer!

Model 3007. Our lowest priced Allied bookshelf speaker system. Built for outstanding high-fidelity performance at an unbeatable low price! Special 8" woofer has powerful high-flux 1½-lb. ceramic magnet structure coupled to 1" voice coil for high efficiency and smooth, peak-free bass down to 50 Hz. Bass reflex type enclosure with precision tuned ducted port and fiberglass insulation prevents annoying resonance and improves bass output. Whizzer cone improves mid-frequency response for much greater "presence". Direct radiator cone tweeter has 6-oz. Alnico V magnet structure coupled to 9⁄16" voice coil for brilliant treble response up to 15,000 Hz. Built-in resistor-capacitor type crossover network divides system response at 8000 Hz for efficient distribution of sound. Solid ¾" wood enclosure has handsome walnut moldings and oiled walnut veneer finish. Durable, attractive cane grille cloth will complement any decor. Fits almost anywhere—only 11⅛x18⅞x7⅞" deep.
20 A 9739 X. Shpg. wt., 17 lbs. 24.95

SPECIFICATIONS

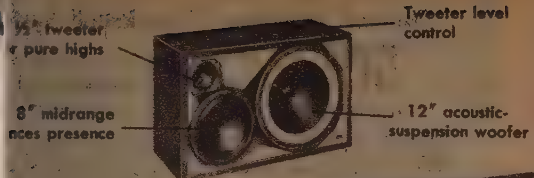
Frequency Response: 50-15,000 H *Woofer:* 8" with whizzer midrang cone; 1½-lb. ceramic magnet stru ture and 1" voice coil. *Tweete* 3½" with 6-oz. Alnico V magne structure and 9⁄16" voice co *Crossover:* R-C type at 8000 H *Power Capacity:* 15 watts, 30 watt peak. *Impedance:* 8 ohms. *E closure:* ¾" wood bass reflex wit fiberglass insulation and tune port.

Allied Extension Speaker with walnut finis

12^{95}

Perfect extension speaker for stereo in that "other" room, or an auxiliary speake for radios or TV sets

Model 2375A. Here's wide-range sound at the lowest pos price. This decoratively-styled extension speaker system fea convenient side-mounted volume control, plus a husky 6x9" speaker with 9⁄16" voice coil for smoother sound. Use a pai surprisingly good stereo sound. Handsome walnut-fin cabinet with matching cane grille cloth. Includes 25 fee speaker cable with alligator clips attached. Power Capaci watts, 12 watts peak. Impedance, 8 ohms. Measures only 11½x3¾" deep.
20 A 9746 X. Shpg. wt., 4 lbs. ....



Save when you buy a pair of our best-selling Utah acoustic-suspension 3-way 12" Systems

One system **89.95**

Two systems **90.95**

$5 monthly*

A special-purchase value

Model A-90. Two three-way acoustic-suspension speaker systems engineered for fine quality can be yours for only $90.95. Big 12" high-compliance woofer with 2¼-lb. magnet structure (Alnico V magnet) and 1½" copper voice coil delivers powerful, natural bass all the way down to 28 Hz.

Midrange 8" speaker produces clear middle frequencies. 3½" cone tweeter provides clean, pure treble. Tweeter brilliance control. Sturdy ¾" wood walnut veneer cabinet with complementary beige grille cloth.

Smooth response from 28 to 18,000 Hz. Electrical crossovers at 2200 and 5000 Hz. Power capacity, 30 watts, 60 watts peak. Impedance 8 ohms. Size, 14x23x10".

20 A 7053 U. One System. Wt., 33 lbs.	89.95
Two Systems. Shpg. wt., 66 lbs.	90.95

ensational offer on two Utah acoustic-
ension two-way 8-inch Speaker Systems

ne stem **49.95**
$5 monthly*

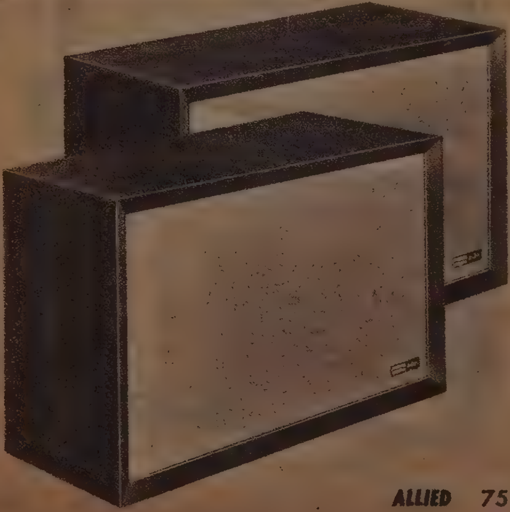
Two Systems **50.95**
$5 monthly*

l **AS-2.** An unbeatable value . . great for the budget-
ed. You can buy a pair of quality-made Utah two-
8-inch acoustic-suspension speaker systems for
$50.95. Offers wide response sound. Compact
et fits most anywhere.

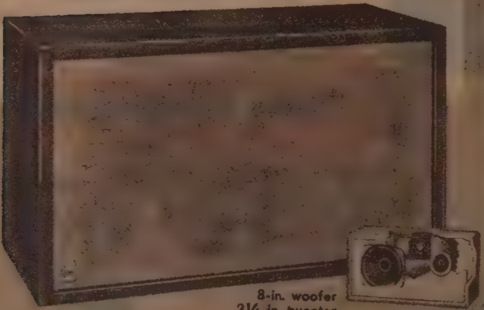
ures 8" woofer, with four-layer 1" voice coil, that
duces deep, powerful bass down to 40 Hz. Low
ant frequency. 3½" tweeter with 9/16" diameter
coil offers sparkling treble all the way up to
0 Hz. Impedance, 8 ohms.

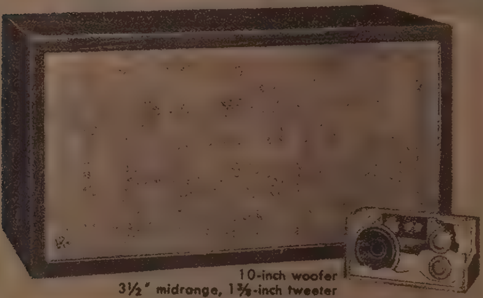
sover at 4500 Hz for optimum frequency distribu-
Capacity: 15 watts, 25 watts peak. Handsomely
d ¾" walnut veneer cabinet only 11x18x9".

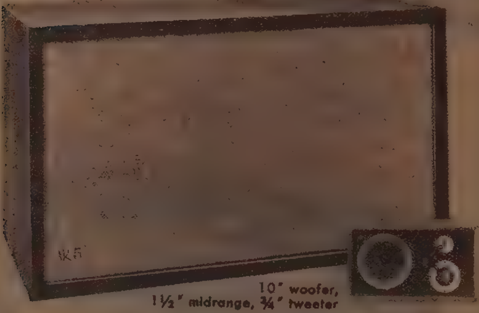
7073 U. One Speaker System. Wt., 22 lbs.	49.95
Speaker Systems. Shpg. wt., 44 lbs	50.95

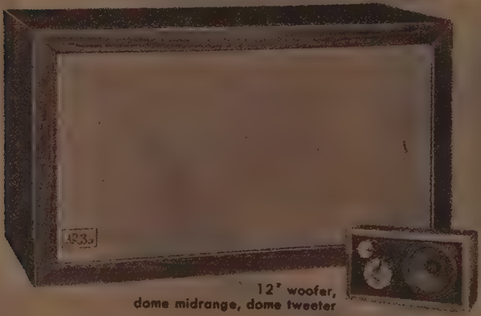


Acoustic-suspension Speaker Systems by AR INC.


8-in. woofer
2¼-in. tweeter


10-inch woofer
3½" midrange, 1⅜-inch tweeter


10" woofer,
1½" midrange, ¾" tweeter


12" woofer,
dome midrange, dome tweeter

Compact two-way 8" Bookshelf Sys

51^{00}

Ready-to-finish

- AR's lowest-priced speaker
- Delivers wide-range natura
- Shelf size for use anywhere

Model AR-4X. One of the finest low-cost speaker syst the market today. Famous AR acoustic-suspension provides pure, natural sounding music. Features 8" that delivers rich bass response that far exceeds wh would expect in a model this size. Specially designed for smooth treble. Built-in tweeter level control. C shelf size for easy installation. 1200 Hz L-C (elec crossover network. Requires amplifier rated at le watts per channel. Impedance, 8 ohms. Size, 10 Shpg. wt., 22 lbs.

20 A 7629 U. Oiled Walnut......................
20 A 7628 U. Ready-to-Finish Pine...................

Popular three-way 10" Speaker Sys

109^{00}

Ready-to-finish

- 10" woofer with 3¼-lb. mo
- Extra-wide dispersion twee
- Response from 42-20,000

Model AR-2AX. One of AR's most popular systems. excellent performance at a moderate price. Include acoustic-suspension woofer with 3¼-lb. magnet as plus 3½" midrange speaker and a 1⅜" dome type tweeter. Tweeter and midrange level controls. L-C overs at 2000 and 7500 Hz. 42-20,000 Hz. Requires fier rated at least 20 watts per channel. Impeda ohms. Size, 13½x24x11½". Floor base below. 43 lb

20 A 7046 U. Oiled Walnut......................
20 A 7044 U. Natural Birch......................
20 A 7047 U. Ready-to-Finish Pine...................

AR-2X Two-Way 10" System. Above, no midrange. 3

20 A 7050 U. Oiled Walnut......................
20 A 7051 U. Ready-to-Finish Pine...................

Deluxe three-way 10" Speaker Syst

156^{00}

Ready-to-finish

- Extended low-frequency re
- Uniquely accurate midrang
- Extremely low distortion lev

Model AR-5. Offers superb wide-range sound in a c system that allows easy placement. Basically the sa tem as the famous AR-3a but with a 10" acoustic- sion woofer that offers uniform and extended low-fre response. 1½" dome midrange, ¾" tweeter. Indep midrange and tweeter level controls. Requires a rated at least 20 watts per channel Impedance, 8 13½x24x11½". Floor base below. Shpg. wt., 39 lb

20 A 7224 U. Oiled Walnut......................
20 A 7225 U. Natural Birch......................
20 A 7227 U. Ready-to-Finish Pine...................

Finest three-way 12" Speaker Syst

225^{00}

Ready-to-finish

- 12" woofer • 1½" midr
- ¾" dome radiator tweete
- Response from 32 to 20,0

Model AR-3a. AR's finest acoustic-suspension s system. Lifelike sound down to low bass frequenc woofer, two dome radiator speakers, 1½" and ¾". R amplifier rated at least 25 watts per channel. 4 oh 25x11⅜". Shpg. wt., 55¾ lbs.

20 A 7042 Z. Oiled Walnut......................
20 A 7041 Z. Natural Birch......................
20 A 7040 Z. Ready-to-Finish Pine...................

AR-3 Three-Way 12" System. Above, but one tweeter. 5

20 A 7624 Z. Oiled Walnut......................
20 A 7149 Z. Natural Birch......................
20 A 7002 Z. Ready-to-Finish Pine...................
20 A 8015 X. Oiled Walnut Floor Base. Fits all AR s except AR-4X. 11x14½x13". Shpg. wt., 3¾ lbs....

SHIPPING NOTE: Items with suffix U, W or Z in stock no. or express. See Ordering Informatio

269^{95} $14 monthly*

199^{95} $10 monthly*

A Fisher three-way 15″ System

XP-15B. Superbly crafted contemporary floor system
iassive 15″ woofer with 12-lb. magnet structure for
ınding bass response down to 28 Hz. Full, clean mid-
is supplied by an 8″ midrange speaker. Soft-dome
;weeter provides thrilling highs to 20,000 Hz. Cross-
at 400 and 2500 Hz. Capacity, 60 watts. 8 ohms.
ıed in striking oiled walnut. 27x27x14¾″.
'215 Z. Shpg. wt., 90 lbs. 269.95

B Fisher three-way 12″ System

XP-12. Attractively-styled three-way floor system
rs exceptional high-fidelity reproduction. Has power-
2″ woofer with 6-lb. magnet structure for full, rich
Clean middle frequencies delivered by 8″ midrange
molded rubber surround for life-like presence in
. Soft dome 1½″ tweeter for crisp clear highs. Boasts
tionally smooth response from 30-20,000 Hz. Im-
ıce, 8 ohms. Capacity, 50 watts. Handsome oiled
ıt finish. 24x22½x13¾″. Shpg. wt., 80 lbs.
'216 Z. 199.95

299^{95} $15 monthly*

285^{00} $15 monthly*

Empire three-way 15″ marble-top System

l 9000M. A masterpiece of acoustic design, elegant
gonally styled 3-way floor speaker system has a mass-
d 15″ woofer for deep, resonant bass; smooth, direct-
tor midrange; ultrasonic tweeter for startling highs.
ptional 20-20,000 Hz response. Capacity, 100 watts.
dance, 8 ohms. Tweeter level control. Satin walnut
ı; imported marble top. 22″ diameter, 29″ high.
7270 Z. Shpg. wt., 123 lbs. 299.95

D University three-way 12″ System

literranean." Elegant enclosure combines decorator-
n with superb performance. High-compliance 12″
er, 8″ direct-radiator midrange, and reciprocating
horn tweeter combine to produce thrilling hi-fi from
z to beyond audibility. Capacity, 50 watts. Impedance,
ıms. Beautiful grained antique butternut, pumice-
n finish. 22½x24⅜″ diameter.
7122 Z. Shpg. wt., 75 lbs. 285.00

Decorator-styled deluxe hi-fi floor Speaker Systems

ALTEC-LANSING

These 3 systems boast same superb components as famous "Voice of the Theatre"

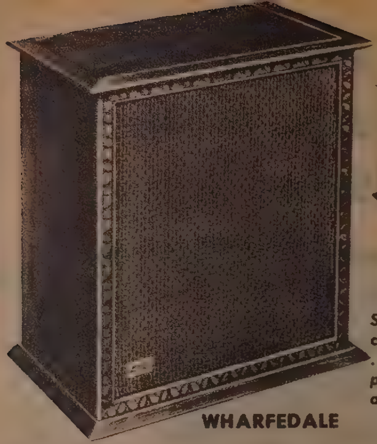
Low as 339^{00} $16 monthly*

Deluxe 15″ floor Speaker Systems

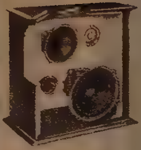
E **Model 846A.** Magnificent "Valencia" system has same components as Altec's renowned Voice of the Theatre system, but in an enclosure half the size! Gigantic 416A 15″ woofer offers rich, powerful bass response. Precision 806A high frequency driver and 811B sectoral horn deliver smooth midrange and brilliant highs. Dual LC network with 800 Hz crossover. Response: 35-22,000 Hz. Impedances: 8, 16 ohms. Capacity: 50 watts. Hand-finished walnut cabinet with fretwork grille. 29¾x27½x19″.
20 A 7439 Z. Shpg. wt., 100 lbs. 339.00
20 A 8210 U. Model A-7. Components above (woofer, driver, horn, crossover), less enclosure. 43 lbs. 190.50

F **Model 871A.** Famous "Voice of the Theatre" system above in "Milano" Italian Provincial cabinet. Sculptured doors open. Distressed pecan cabinet. 29¼x28x19″.
20 A 8199 Z. Shpg. wt., 112 lbs. 395.00

G **Model 848A.** Same excellent sound quality as the famous "Voice of the Theatre" system, described above. Finished in true Spanish-design "Flamenco" hand-crafted oak cabinet with unique grillework of Spanish-style simulated wrought iron. 27¾x27½x19⅜″.
20 A 8198 Z. Shpg. wt., 105 lbs. 339.00



WHARFEDALE



Sand-filled construction . . inert cabinet prevents bass distortion

Floor Speaker System

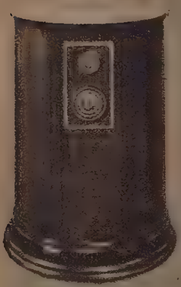
Luxurious four-way 12½″ System

179⁹⁵

- Big 12½″ woofer with 9½-lb. magne
- Vibrationless sand-filled construction
- Air-tight acoustic-suspension enclosure

Model W70D. Deluxe floor system offers superlative p formance. Unique construction features white sand pack between layers of hardwood to create inert panels wh prevent cabinet vibration. Has 12½″ long-throw woo with massive 9½-lb. magnet for thunderous bass. An speaker serves as passive radiator for upper bass and ergized driver for lower midrange. Isolated upper m range 5″ speaker. Omnidirectional Mylar-domed su tweeter for pure, wide-angle treble. Midrange, treble c trols. Response, 25-20,000 Hz. Capacity, 40 watts. ohms. Oiled walnut finish, deluxe moldings. 24x22¾x13

20 A 7414 Z. Shpg. wt., 73 lbs.......................179



EMPIRE pedestal three-way 12″ System

199⁹⁵

Floating-suspension 12″ woofer

Model 7000M. Elegant pedestal-styled three-way system features mass-loaded 12″ floating-suspension woofer, direct radiator midrange, and ultra-sonic dome tweeter for full, rich sound across the entire audio range. Frequency response, 25-20,000 Hz. Power capacity, 75 watts. Impedance, 8 ohms. Satin walnut finish cabinet with imported marble top. 26½″ high. 19″ diameter.

20 A 7297 Z. Wt., 90 lbs.......199.95

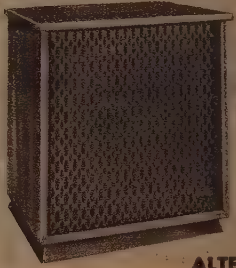
EMPIRE pedestal three-way 10″ System

149⁹⁵

Deluxe imported marble top

Model 3000M. Handsome pedestal-styled three-way system boasts 10″ high-compliance woofer for powerful bass to 30 Hz. Direct-radiator midrange handles middle frequencies clearly and cleanly. Super tweeter delivers crisp, sparkling treble. Frequency response, 30-20,000 Hz. Power capacity, 60 watts. Impedance, 8 ohms. Satin walnut cabinet with imported marble top. Size, 21¼x11⅞x11⅞″.

20 A 7295 U. Wt., 49 lbs.......149.95



Features popular Biflex 15″ speaker

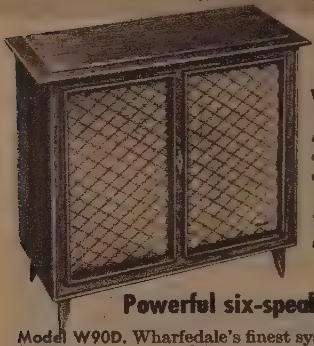
229⁹

ALTEC-LANSING

Contemporary-styled 15″ systen

Model 872 Madrid. Features 420A Biflex 15″ full-response speaker with 10½-lb magnet structure and 3″ voice coil fo wide dynamic range and excellen transient response. Direct radiating tweeter for bell-like highs. Response 40-18,000 Hz to assure faithful soun reproduction. Capacity, 35 watts. ohms. Oiled walnut finish, fretwork grille. 24x21½x17½″.

20 A 7442 Z. Wt., 65 lbs..........229.9



WHARFEDALE

Magnificent sounding acoustic-suspension deluxe System

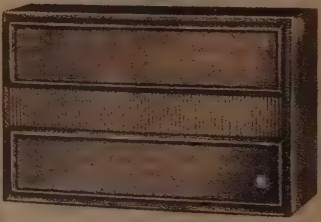
289⁰⁰ less base

Powerful six-speaker 12½″ System

Model W90D. Wharfedale's finest system. Boasts two 12½″ woofers, each with 9½-lb. magnet, which divide the range for magnificent bass; two 5″ midranges; two omnidirectional super tweeters. Sand-filled construction prevents cabinet vibration. Response, 20 Hz to beyond audibility. Midrange, treble controls. Capacity, 50 watts. 4-8 ohms. Oiled walnut. 23¾x30x13½″. Optional base below.

20 A 7416 Z. Shpg. wt., 115 lbs.......................289.00

20 A 7590 X. Four-Leg Base. Shpg. wt., 1¾ lbs..........8.93



JENSEN

Smart contemporar styling blends with any decor

247⁵⁰

Superb four-way 12″ Speaker System

Model 700-XLW. Four-way speaker system puts unc promising sound reproduction in a smart, contempo cabinet. Features 12″ Flexair woofer with 3.6-lb. mag horn-loaded midrange, super-tweeter and ultra-twee Has mid- and high-frequency balance controls. Freque response, 20-25,000 Hz. Impedance, 8 ohms. Power pacity, 40 watts. Oiled walnut finish. 16¼x25½x12″.

20 A 8364 U. Shpg. wt., 60 lbs.......................24

20 A 8368 X. Stand for above. Wt., 3¾ lbs..........1

SHIPPING NOTE: **Items with suffix U, W or Z in stock no. sent or express. See Ordering Information p**

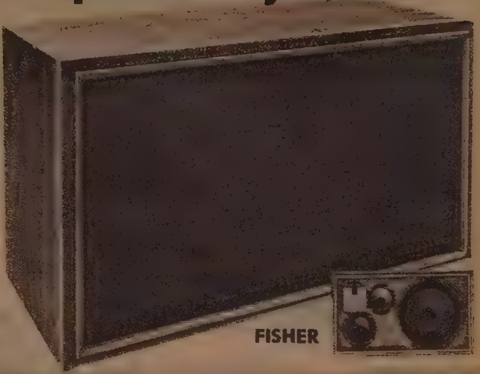
Deluxe hi-fi bookshelf Speaker Systems

ur-way 12″ System for true-to-life sound

- Full response with sparkling highs
- 3-position treble balance control
- Four-way LC-type crossover network

179^{95}

lel XP-9B. Delivers smooth, rich bass, clean, clear mid- uencies, and crystal-clear highs. Features 12″ woofer 2″ voice coil and 6-lb. magnet structure; 6″ lower-range with 1″ voice coil and 2-lb. magnet structure; 5″ er-midrange with ¾″ voice coil and 1-lb. magnet cture; plus 1½″ soft-dome treble speaker with 1½″ e coil and 3-lb. magnet structure. Has four-way LC work with air-core coils. Treble balance control adjusts texture of upper frequencies to perfection. Response, 2,000 Hz. Power capacity, 10-60 watts. Impedance, 8 s. Walnut finish. 14x24½x12″.
7312 Z. Shpg. wt., 60 lbs. 179.95



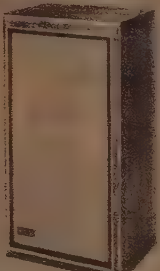
FISHER

ELECTRO-VOICE

12″ . . E-V's best bookshelf System

9^{95}

el EV-4A. Three-way system fea- s 12″ woofer with 10-lb. magnet cture. Closed-cell polymer foam ound allows long, linear cone ex- ions. 6″ midrange with half-roll ound for smooth, flat response. ″ viscous-damped cone tweeter. ssover employs high-Q inductors high efficiency. Separate level trols for midrange and tweeter. 0,000 Hz. Capacity, 70 watts k. 8 ohms. Walnut. 14x25x13½″.
7244 Z. Wt., 55 lbs. 179.95



KLH

Four-speaker three-way 12″ acoustic suspension

179^{95}

Model 5. Combines wide frequency range, low distortion, and uniform response across the audible frequency range. Has 12″ woofer with heavy cone and magnet assemblies. Two heavy magnet midrange speakers. 1¾″ direct radiator tweeter. Two three-position switches enable you to adjust mid- and high-frequency ranges. Capacity, 25 watts minimum. 8 ohms. ¾″ plywood with furniture-grade walnut veneer. 26x13¾x11½″.
20 A 7140 Z. Wt., 51 lbs. 179.95

ALTEC-LANSING

Famous 10″ deluxe System

179^{00}

Model 890C. Features 10″ woofer with cast aluminum frame, 10-lb. magnet structure, and 10″ passive radiator. Compression-driven exponential die cast aluminum horn tweeter. LC crossover network at 2000 Hz with three-position switch for adjusting high-frequency range. Response, 35-20,000 Hz. Power handling capacity, 50 watts. Impedance, 8 ohms. Hand-rubbed walnut finish with contemporary grille fretwork. 14½x25½x12¼″.
20 A 7443 U. Wt., 38 lbs. 179.00

ALTEC-LANSING

Two-way 10″ Superb System

5^{00}

del 892A. Combines wideband re- nse with extremely low distortion wide-angle distribution. Boasts 10″ low-frequency woofer; com- ssion-drive with an exponential minum high-frequency horn. Sealed nite-baffle enclosure. Response, 45- 00 Hz. Power capacity, 50 watts. edance, 8 ohms. Oiled walnut fin- Size, 13x11¾x23¾″.
A 7448 U. Wt., 39 lbs. 145.00

FISHER

Four-speaker 3-way 12″ System

139^{95}

Model XP-7. Features four perfectly matched speakers to bring you exceptional performance. Has 12″ high-compliance woofer with 5½-lb. magnet; two 5″ midranges; soft-dome tweeter. LC crossovers at 300 and 2500 Hz. Frequency response, 30-20,000 Hz. Power handling capacity, 60 watts (10 watts minimum). Impedance, 8 ohms. Walnut finish. 24½x14x12″.
20 A 7305 U. Wt., 47 lbs. 139.95

JENSEN

Four-speaker 3-way 10″ System

115^{20}

Model TF-3BW. Fine-performing shelf system includes 10″ Flexair® woofer with 1¼-lb. magnet, two 3½″ midranges, and Sono-Dome® ultra-tweeter. Offers magnificent high-fidelity sound throughout the entire frequency range from 25-20,000 Hz. Power capacity, 25 watts. Impedance, 8 ohms. Oiled walnut finish with handsome fretwork grille. 13½x23¾x11⅜″.
20 A 8362 U. Wt., 40 lbs. 115.20

Deluxe-quality hi-fi bookshelf Speaker Systems

129⁹⁵

Woofer has massive 9½-lb. magnet assembly

WHARFEDALE

Acoustic-suspension three-way 12½" System

Model W-60D. A best-seller for years. Features exclusive sand-filled Achromatic design. Has same exceptionally powerful 12½" woofer with 9½-lb. magnet assembly found in Wharfedale's larger models. Acoustically-isolated 5" cone with cloth suspension and low mass aluminum voice coil for clear, smooth midrange. Omnidirectional domed super tweeter for distortion-free treble. Midrange, treble controls. Frequency response, 30-20,000 Hz. Power capacity, 40 watts. Impedance, 4-8 ohms. Walnut cabinet, 14¼x24x13". Operates vertically or horizontally.
20 A 7413 Z. Shpg. wt., 56 lbs.......................**129.95**

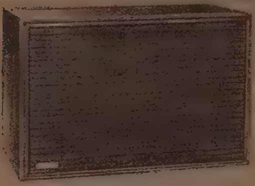
109⁹⁵

High-compliance woofer with 5-lb. magnet structure

FISHER

Free-piston three-way 12" system

Model XP-66. Fisher excellence is designed into this 3-w
bookshelf system. Free-piston 12" woofer with 5-lb. magn
structure delivers natural, uncolored bass down to 30 H
You hear even deepest organ notes with life-like timbr
Isolated 6" midrange speaker reproduces 400 to 1000 H
notes with clarity. Wide-dispersion cone tweeter offers cri
highs to 19,000 Hz without shrillness and with excelle
transient response. Power capacity, 60 watts. Impedanc
8 ohms. Attractive, hand-rubbed oiled walnut finish. Si
14x24½x12".
20 A 7174 U. Shpg. wt., 40 lbs......................**109.**



UNIVERSITY

119⁹⁵ *Dramatic styling*

"Laredo" four-way 12" system

Four-way speaker system in contemporary Moorish cabinet. 12" woofer delivers natural, uncolored sound. 8" two-way midrange reproduces middle frequencies with clarity. Sphericon tweeter offers bell-like highs. Frequency response, 30-30,000 Hz. Brilliance control lets you adjust highs to your taste. Power handling capacity, 40 watts. Impedance, 8 ohms. Beautiful oiled walnut finish. Size, 24x15¾x12⁹⁄₁₆".
20 A 7103 U. 47 lbs...**119.95**

UTAH

118⁹⁵ *Horn midrange and tweeter*

Acoustic-suspension three-way 12" system

Model A-520. Superb system has high-compliance 12" acoustic-suspension woofer delivers natural sounding bass. Wide-dispersion compression horn midrange and tweeter speakers. Response, 30-20,000 Hz. Capacity, 30 watts. 8 ohms. Tweeter control. Oiled walnut. Size, 14x25x13½".
20 A 7058 U. 49 lbs....**118.95**

Model A-501. As above, except 8" direct radiator midrange. Response, 33-20,000 Hz. 14x24x10".
20 A 7059 U. 33 lbs....**99.95**

UNIVERSITY

99⁹⁵ *Ultra-linear response*

Project "M" two-way 11" speaker system

Features new 11" woofer with four-layer voice coil for smooth distortion-free bass response. The special 2½" closed-back tweeter gives extended high-frequency response and broad dispersion without beaming effect at any frequency.

Frequency response, 30-20,000 Hz. Power handling capacity, 30 watts, 60 watts peak. Impedance, 8 ohms. Beautiful handrubbed oiled walnut finish. Size, 12¾x23½x11⅞".
20 A 7236 U. 30 lbs....**99.95**

GOODMANS

99⁹⁵ *Delivers natur sounding bas*

Acoustic-suspension three-way 12" syste

Model G-20. Handsome sy
tem delivers excellent sou
over the audio range. Acou
tic-suspension 12" woof
reproduces stunning ba
down to 20 Hz. 6" midran
has high-compliance clo
suspension. 3½" tweeter.
Electrical crossovers.
wood enclosure with waln
veneer and solid waln
moldings. Tweeter br
liance control. Response, 2
20,000 Hz. Capacity,
watts, 40 peak. 8 ohn
14¾x23¾x11¼".
20 A 7142 U. 41 lbs.....**99.**

SHIPPING NOTE: Items with suffix U, W or Z in stock no. sent tr
or express. See Ordering Information pag

r every decor

WHARFEDALE

94⁵⁰ **Acoustic-suspension three-way 10″ system**

l W40D. Three-way system in air-tight acoustic-nsion enclosure delivers natural wide-range sound. igh-compliance woofer. 5″ isolated midrange in suspension. Omnidirectional super-tweeter with num voice coil for extended response. Acoustic compensator for uniform dispersion. Midrange reble controls. Frequency response, 35-20,000 Hz. r capacity, 35 watts. Impedance, 4-8 ohms. walnut enclosure, 12¼x23½x10⅛″.
7412 U. Shpg. wt., 37 lbs....................94.50

Special purchase

UTAH

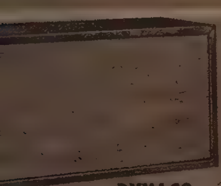
59⁹⁵ **Acoustic-suspension three-way 12″ System**

Model A-100. Allied's buying power makes this low price possible. Excellent hi-fi reproduction of the full orchestral range. Features acoustic-suspension 12″ woofer that delivers natural, undistorted bass down to 28 Hz. Die-cast midrange horn for wide dispersion of clear mid-tones. High-efficiency tweeter for highs up to 19,500 Hz. Level control. Crossovers at 2200 and 4500 Hz. Capacity, 60 watts peak. Impedance, 8 ohms. ¾″ oiled walnut veneer cabinet. 14x23x10″.
20 A 7055 U. Wt., 35 lbs........................59.95

ARGOS

89⁹⁵ **Three-way 12″ System**

l XL-500. Features Jensen 12″ er for resounding bass. Power-′ midrange speaker. Compres-horn tweeter for wide disper-highs. Response, 35-18,000 Capacity, 50 watts peak. Im-nce, 8 ohms. ¾″ walnut cabi-Size, 14¾x25x9″.
7357 U. Wt., 31 lbs......89.95



DYNACO

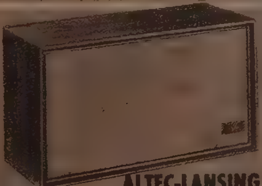
95 **High-capacity two-way 10″ system**

el A-25. Aperiodic (non-reso-) design for high power ca-ty without distortion. 10″ ex-ed excursion woofer. Dome ter. Five-position level con-Hz. Capacity, better than 60 s rms. 8 ohms. With wall kets. Walnut. 11½x20x10″.
7316 U. Wt., 22 lbs.....79.95

ELECTRO-VOICE

89⁹⁵ **Acoustic-suspension two-way 10″ System**

Model E-V Five C. 10″ woofer has 4-layer voice coil for deep bass. 2½″ tweeter. Tweeter control. 30-20,000 Hz. 60 watts peak. 8 ohms. Walnut. 12¼x21¾x10⅜″.
20 A 7238 U. Wt., 31 lbs......89.95
20 A 7239 U. Model E-V Nine. Above, 5″ midrange, 3½″ tweeter. 13½x24x11½″. Wt., 43 lbs.......129.60



ALTEC-LANSING

85⁵⁰ **Acoustic-suspension two-way 10″ system**

Model 893A. Natural bass delivered by high compliance 10″ woofer in infinite baffle. Clear highs from 3″ direct radiating tweeter. Response, 50-18,000 Hz. Capacity, 40 watts (rms). Crossover at 2500 Hz. Impedance, 8 ohms. Oiled walnut. Size, 12¼x22x9½″.
20 A 7387 U. Wt., 22 lbs.....85.50

UTAH

89⁹⁵ **Acoustic-suspension three-way 12″ System**

Model WD-90. High-compliance 12″ woofer provides deep bass. 8″ midrange. 3½″ tweeter. 35-18,000 Hz. Capacity, 30 watts. 8 ohms. Tweeter cont. Walnut. 14x23x10″.
20 A 7061 U. Wt., 33 lbs.....89.95
20 A 7062 U. WD-80. Above, but 5″ midrange. 35-17,500 Hz. Shpg. wt., 28 lbs.....................79.95

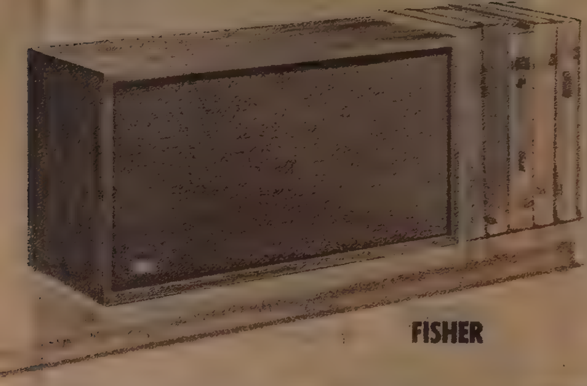
FISHER

79⁹⁵ **Two-way 10″ free-piston system**

Model XP-60. Free-piston woofer with 4-lb. magnet structure operates with high compliance for rich bass response. 2½″ treble speaker provides pure highs and clear midrange. 35-20,000 Hz. Capacity, 40 watts (10 watts min.). 8 ohms. Walnut. 13x23x10½″.
20 A 7212 U. Wt., 30 lbs.....79.95

your speaker system with no money down . . Credit details on page 438

Bookshelf Speaker Systems at popular price

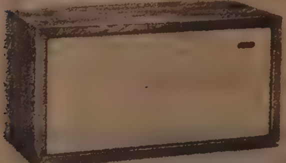


FISHER

Two-way 8" Speaker System with special-design suspension

49^{95} *8" woofer features long-throw half-roll surround*

Model XP-55B. Bookshelf size, yet delivers im pressive wide-range sound. 8" woofer with 2-l magnet structure, in a newly-designed suspensio system using a long-throw half-roll surroun 3" treble speaker has a low-mass cone for peak free response to 20,000 Hz, without coloratio Completely enclosed baffle is heavily dampe with Acoustiglas packing, resulting in funda mental bass response down to 37 Hz, withou doubling. Response, 37-20,000 Hz. 8 ohms Recommended amplifier power, 10 to 30 watt Walnut finish. Size, 10x20x7½".
20 A 7214 U. Shpg. wt., 18 lbs. 49.9



UNIVERSITY

79^{95} **Three-way 10" ultra-linear System**

Ultra-D. Features an ultra-linear distortion-free 10" woofer for excellent bass reproduction. 4" midrange speaker with a special curvilinear cone, 3½" cone tweeter, aluminum voice coil. Brilliance/presence control. Response ranges from 30 Hz to beyond audibility. 8 ohms. 32 watts peak power capacity. Oiled walnut finish. Size, 11⅞x23$\frac{13}{16}$x9¾".
20 A 7121 U. Wt., 24 lbs. 79.95

UTAH

69^{95} **8" three-way with acoustic suspension**

Model A-70. High-performance speaker system offers quality sound reproduction at moderate cost. Features high-compliance 8" woofer that delivers deep, natural bass without boominess. Has 5" direct radiator midrange speaker and 3½" tweeter. Response, 40-17,500 Hz. 8 ohms. 15 watts; 30 peak. Handsome hand-rubbed oiled walnut veneer finish. 11¾x19x8½".
20 A 7057 U. Wt., 19 lbs. 69.95

ADC
Two-way
acoustic
suspensio
system

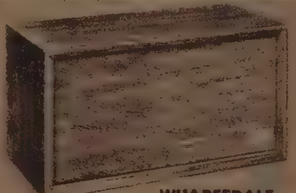
69^{00}

Model 210. Designed to fill t needs of those who seek truly im pressive sound at a modest pric Delivers smooth sound reprodu tion over the entire musical spe trum. 8" acoustic suspension woofe with treated cone and plasticize rubber surround. 2½" cone twee er. Three-position treble contro 35 Hz to beyond audibility. 8 ohm 30 watts. Walnut. 23¼x13x11
20 A 7241 U. Wt., 37 lbs. 69.0

JENSEN

69^{50} **8" two-way with horn-loaded tweeter**

Model X-45. Offers natural sound reproduction of the resounding lows and clear shimmering highs of your favorite music. Excellent for compact central stereo or remote extensions. 8" Flexair woofer and compression driven horn-loaded tweeter. Balance control. Response, 30-18,000 Hz. 8 ohms. 25 watts. 2000 Hz crossover. Oiled walnut finish. 10½x19½x9".
20 A 7081 U. Wt., 24½ lbs. . .69.50



WHARFEDALE

59^{45} **8" two-way with acoustic compensator**

Model W30D Mark II. Heavy-duty long-throw 8" woofer for deep, rich bass reproduction. Features super omnidirectional 3" tweeter with acoustic phase compensator. Variable tweeter control. Floating grill eliminates buzz. Frequency response, 40-18,500 Hz. 4-8 ohms. 35 watts power capacity. Attractive hardwood walnut veneer finish. Size, 10x19x9¼".
20 A 7418 U. Wt., 20 lbs. 59.45

ELECTRO-VOICE

59^{85} **8" two-way with unique cone dampin**

Model E-V Seven B. Special hig compliance 8" woofer delivers e ceptionally low bass without di tortion. 3½" cone tweeter emplo unique symmetrical cone dampi to ensure silky-smooth high Variable tweeter control. Fr quency response, 40-20,000 H Impedance, 8 ohms. 50 watts pe capacity. 2000 Hz electrical cro over. Walnut finish. 10x19x8
20 A 7243 U. Wt., 19 lbs. . . . .59.

SHIPPING NOTE: Items with suffix U, W or Z in stock no. sent tr or express. See Ordering Information pag

ow-cost compact bookshelf Speaker Systems

Two-way air-suspension System with 6″ woofer and 1½″ tweeter

Ideal for compact stereo rigs, or as a "second room" system **49^{95}**

odel ADC 404. This compact speaker system, not uch larger than a few books, is an ideal choice for oderately-priced stereo music enjoyment. Offers cellent, well-balanced, wide-range sound. Highmpliance 6″ woofer provides realistic low freencies. 1½″ dome tweeter gives clear highs. Sealed closure is filled with sound-absorbing material, using it to function as an air-suspension system. esponse ranges from 45 Hz to beyond audibility. npedance, 8 ohms. Capacity, 10 to 60 watts. eautiful oiled walnut finish. Size, 7⅞x11⅞x8¼″.
A 7240 X. Shpg. wt., 11 lbs. 49.95

WHARFEDALE

4^{95} 8″ two-way features acoustic suspension

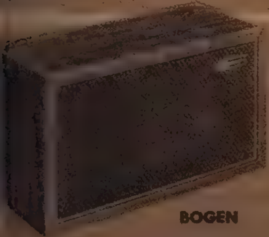
del W20D. Achromatic acoustic spension in a compact speaker stem. Has high-compliance 8″ oofer for mellow bass response. nnidirectional pressure dome 3″ eeter provides impressive highs. riable acoustic control for maxiam tonal adjustment. 45-18,000 . 10 watts minimum power reirement. 4-8 ohms. Handsome ed walnut finish. 9¾x14x8½″.
A 7417 X. Wt., 14 lbs. 44.95

FISHER

High-compliance 6″ two-way with full 2-lb. magnet structure

44^{50}

Model XP-44. Designed especially for high-fidelity enthusiasts who demand the quality performance of a large speaker system, but in an enclosure far smaller in size, and at an economical price. Specially-engineered 6″ woofer with heavy 2-lb. magnet structure and 1″ voice coil gives smooth bass response at frequencies down to 39 Hz without distortion. Treble speaker with 2½″ cone provides pure, sparkling highs. Frequency Response, 39-19,000 Hz. Impedance, 8 ohms. Recommended amplifier power, 10-25 watts. Handsome hand-rubbed oiled walnut finish. Size, 8¼x15¼x6½″.
20 A 7213 X. Shpg. wt., 15 lbs. 44.50



BOGEN

4^{95} 6″ two-way with acoustic suspension

odel LS10. Delivers excellent fullnge sound. 6″ woofer for smooth ass; 3″ tweeter renders remarkae highs. Response, 40-20,000 Hz. npedance, 8 ohms. Power caacity, 30 watts. Oiled walnut. ize, 8x15x7″.
A 8310 X. Wt., 12 lbs. 44.95

odel LS20. Above, but 8″ woofer. requency Response, 30-20,000 Hz. ower capacity, 40 watts.
A 8311 X. Wt., 19 lbs. 53.95

ELECTRO-VOICE

33^{30} Specially-designed 6″ two-way System

Model EV-Eleven. Fine-sounding two-way system economizes on space and budget. Enclosure resonance tuned to special 6″ two-way speaker. Two coaxial cones, operating from a single voice coil, divide the audio spectrum. Impedance, 8 ohms. Power handling capacity, 25 watts peak. Has walnut finished vinyl coat for lasting beauty. Size, 8¼x15¼x6½″.
20 A 7242 X. Wt., 12 lbs. 33.30

UTAH

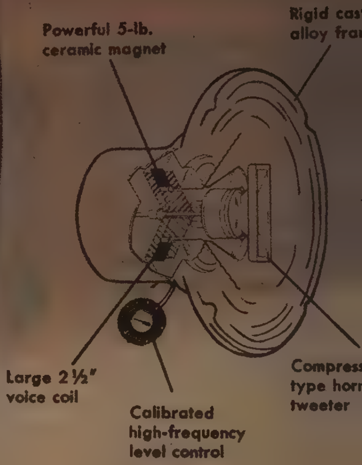
25^{95} 8″ two-way offers space-saving size

Model PT4C. Stand it on the floor, place it on a shelf, or hang it like a picture. Built-in keyhole slots. Features an 8″ woofer and a 3½″ tweeter. Built-in volume control. Impedance, 8 ohms. Peak power capacity, 12 watts. Walnut veneer finish. Dimensions, 12x18x3⅛″. Shpg. wt., 7 lbs.
20 A 7077 X. 25.95

PT2B. Above, except 3x5″ tweeter.
20 A 7066 X. Wt., 6 lbs. 18.95

Our very best! 15" Speaker gives you studio-monitor quality

Professional quality, high power capacity, high efficiency and full response for astounding hi-fi realism


Powerful 5-lb. ceramic magnet
Rigid cas
alloy fra
Large 2½" voice coil
Calibrated high-frequency level control
Compress
type hor
tweeter

Allied® three-way Speaker with massive 5-lb. ceramic magnet for bass you can actually feel

74^{95} $5 monthly *see page 438*

Model 615HC. Nowhere else will you find a speaker at this price offering the premium quality, professional features and superlative performance of the 615HC. Our best high-fidelity speaker boasts a huge 15" high-compliance woofer coupled to a massive 5-lb. ceramic magnet and outsize 2½" voice coil for powerful, distortion-free bass down to 20 Hz.

Middle frequencies from 2000 Hz to 3500 Hz are handled by the Radax midrange cone with transparency and realism that must be heard to be believed! Compression-type horn loaded VHF tweeter provides sparkling treble from 3500 Hz to beyond audibility. Mighty 100-watt peak power handling capacity assures effortless reproduction of even the most demanding orchestral passages.

All moving parts are locked in perfect alignment by the super-strong cast alloy frame for extra durability and years of trouble-free, dependable performance. Precision calibrated brilliance control permits adjustment of high-frequency response to suit room acoustics or personal taste. Built-in electrical crossover network saves you money and effort—you don't have to buy any accessories to properly install the 615HC. Also has convenient coded, push-type binding terminals for fast, easy speaker connection to your amplifier or receiver. Overall mounting depth, 9⅛". Actual weight, 28 lbs.

20 A 9702 U. Shpg. wt., 32 lbs. 74.95

SPECIFICATIONS

Free-Air Resonant Frequency: 25 Hz.

Frequency Response: 20-20,000 Hz.

Crossover Frequencies: Mechanical at 2000 Hz; electrical at 3500 Hz.

Power Handling Capacity: 50 watts, 100 watts peak.

Woofer Magnet: 5-lb. ring-type ceramic.

Tweeter Magnet: 6.8 oz. Alnico V.

Flux Density: 14,500 gauss.

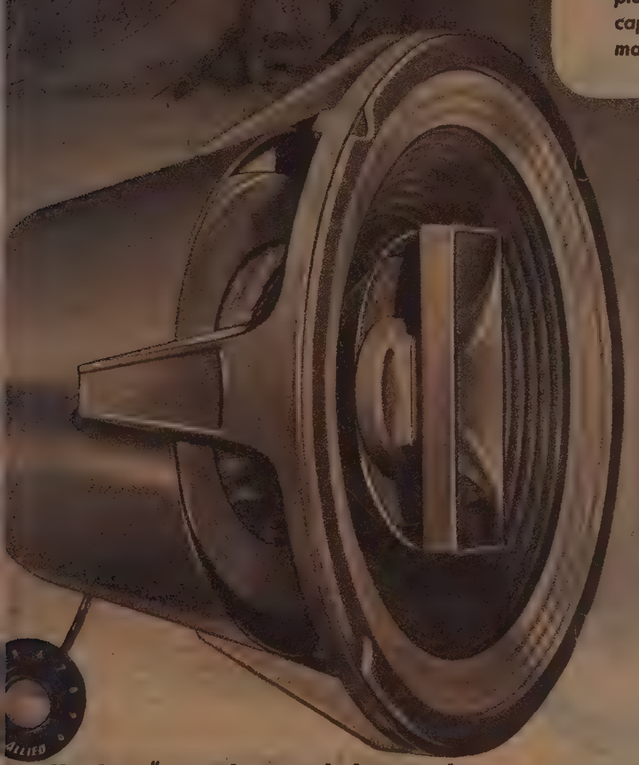
Voice Coils: Woofer, 2½" edge-woun aluminum ribbon; tweeter, 1" edge wound aluminum ribbon.

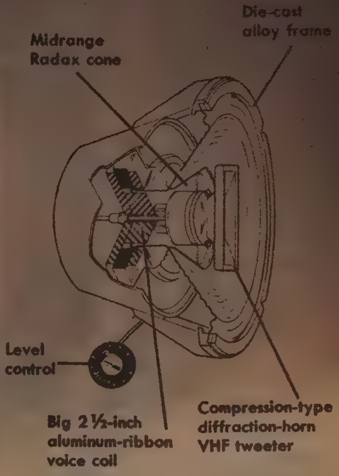
Rated EIA Sensitivity: 55 dB.

Nominal Impedance: 8 ohms.

5-pound magnet, plus 3-way design . . it's our best 12" Speaker

Smooth, wide-range response plus very high power capacity and efficiency for magnificent hi-fi sound




Midrange Radax cone
Die-cast alloy frame
Level control
Big 2½-inch aluminum-ribbon voice coil
Compression-type diffraction-horn VHF tweeter

Allied 12" Speaker with heavy-duty components
ınd high-compliance woofer for full-spectrum music

64⁹⁵ $5 monthly *see page 438*

el 612HC. This is the finest 12" three-way speaker you can buy any-
re at this price! Includes features usually found only in professional-
ity broadcast studio speakers. Husky, heavy-duty 12" high-compliance
fer is coupled to a powerful 5-lb. ceramic magnet and an oversize
edge-wound aluminum-ribbon voice coil for solid, distortion-free
down to 22 Hz. Low free-air resonant frequency permits outstanding
response in almost any speaker enclosure.

range Radax cone with mechanical crossover at 2000 Hz produces
oth, clear midrange sound. Electrical crossover channels frequencies
re 3500 Hz to VHF compression-type horn-loaded tweeter which
erses sparkling treble response up to 20,000 Hz. Tremendous 70-watt
power capacity assures big-beat sound with thunderous realism.
612HC is highly efficient—can be driven by amplifiers rated as
e as ten watts per channel.

able die-cast alloy frame locks voice coils and other moving parts in
ect alignment. Calibrated brilliance control adjusts the tweeter out-
level to suit individual room acoustics or personal taste. Convenient
ed, screw-type binding post terminals permit quick, easy connection
ne speaker to your amplifier; also simplifies stereo phasing. Mounting
h, 7½". Actual weight, 27 lbs.
9701 U. Shpg. wt., 33 lbs. 64.95

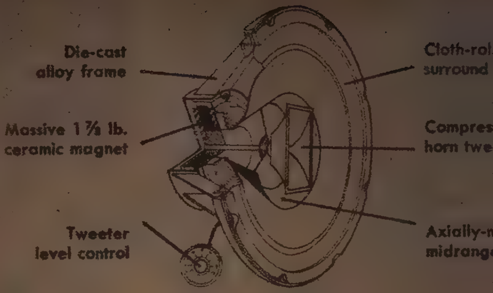
SPECIFICATIONS

Free-Air Resonant Frequency: 40 Hz.
Frequency Response: 22-20,000 Hz.
Crossover Frequencies: Mechanical at 2000 Hz; electrical at 3500 Hz.
Power Handling Capacity: 35 watts, 70 watts peak.
Woofer Magnet: 5-lb. ring-type ceramic.
Tweeter Magnet: 3.15-oz. Alnico V
Flux Density: 14,500 gauss.
Voice Coils: Woofer, 2½" edge-wound aluminum ribbon; tweeter, 1" edge-wound aluminum ribbon.
Rated EIA Sensitivity: 53 dB.
Nominal Impedance: 8 ohms.

pages 88, 89, 98, 99, 100 for complete selection of speaker enclosures

Allied® 3-way 12" acoustic-suspension† hi-fi Speaker

Cloth-roll surround and massive magnets make this speaker really effective in any good acoustic-suspension speaker enclosure.



Acoustic-suspension† type 12" Sp with big magnet delivers powerf

49^{95} *Mount this speaker in th 1290KA shown below a enjoy thrilling hi-fi*

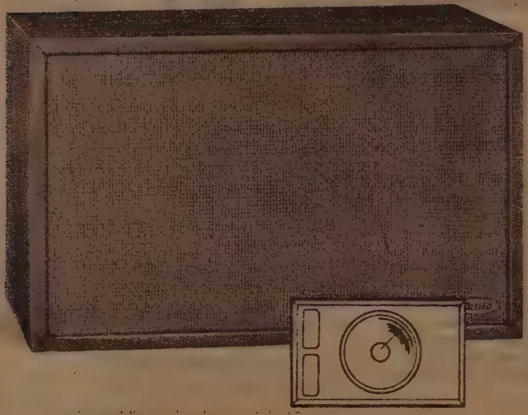
Model 884. New design gives you excellent a full-range three-way speaker. When mount Allied enclosure below, it will deliver magnif ural music from the powerful bass of the pipe the high overtones of the violin. The powerfu boasts cloth-roll suspension to allow cone to mo

Midrange cone radiator adds presence to the i middle frequencies. Compression-type horn provides wide dispersion of sparkling treble. internal dust seal protects voice coil. Leve adjusts tweeter output level.

Rigid die-cast frame keeps critical moving perfect alignment. Color-coded teflon-insulate post terminals. Mounting depth, 6⅝".
20 A 9733 X. Shpg. wt., 11½ lbs. . . . .

SPECIFICATIONS

Free-Air Resonant Frequency: 25 Hz. *Frequ sponse:* 23-20,000 Hz. *Crossovers:* Mechanica Hz; electrical at 4500 Hz. *Power Capacity:* 35 watts peak. *Magnets:* Woofer, 1⅞ lb. ring-type tweeter, 3-oz. ceramic. *Flux Density:* Woo gauss; tweeter, 10,000 gauss. *Voice Coils:* W copper-wire; tweeter, 1" copper-wire. *EIA S* 53 dB. *Nominal Impedance:* 8 ohms.



Allied 12" Enclosure Kit works a reflex or air-tight design

24^{95} *Can be used successfully any 12" speaker—ideal for the Allied 884*

Model 1290KA. Handsome 12-inch speaker kit works as a bass reflex enclosure—easily co an air-tight acoustic-suspension design with cluded accessories. Assures outstanding per with any quality 12-inch speaker; painstaking to give a professional appearance after your q assembly.

Features fiberglass acoustic lining to prevent resonance. Hardwood panels are finished with walnut veneer. Place the assembled kit horizo bookshelf or vertically on floor. Kit is easy to —all you need is a screwdriver. Even includ rubbing-in a beautiful, professional-lookin finish. Acoustically transparent grille cloth i mounted. Terminal strip for easy connectio amplifier. With instructions, oil, conversion ki size, 14¾x24x12".
20 A 9712 U. Shpg. wt., 29 lbs. . . . .

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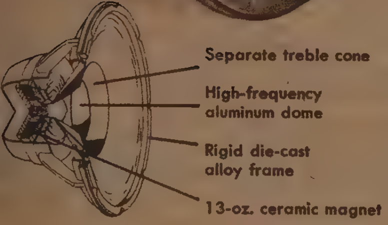
†When used in air-tight enclosure . . also excellent in vent



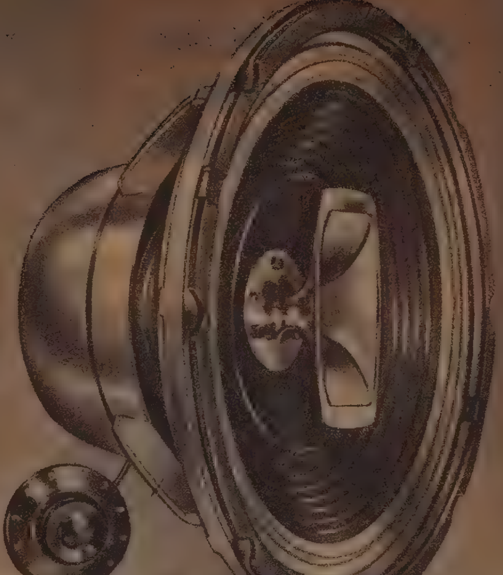
owest priced Allied 12-inch Speaker . two-way design at a budget price

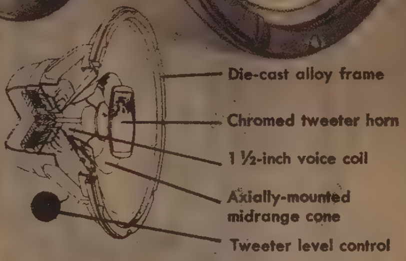
14⁹⁵ *Features high-compliance woofer, midrange cone and aluminum dome for fine sound*

822HCA. Only Allied offers such great high-fidelity at this low price. Our lowest priced 12″ speaker offers ay design, high-compliance woofer and aluminum for solid bass and sparkling treble. An excellent choice -cost hi-fi systems. Has powerful 12-inch high-com- e woofer with 1¼″ voice coil and 13-oz. ceramic mag- r satisfying bass down to 25 Hz. Midrange cone with num dome handles the midrange and treble with sing clarity all the way up to 15,000 Hz. Sturdy, die- lloy frame keeps voice coil in precise alignment for dable performance and long operating life. Conven- inding terminals for easy connections. Low free-air nt frequency assures excellent bass response from od enclosure. Mounting depth, 6⅜″.
751 X. Shpg. wt., 7½ lbs. 14.95

SPECIFICATIONS

ir Resonant Frequency: 30 Hz. *Overall Frequency Re-*: 25-15,000 Hz. *Power Handling Capacity:* 20 watts, tts peak. *Crossover:* Mechanical at 5000 Hz. *Magnet:* ceramic type. *Magnetic Flux Density:* 11,500 gauss. *Coil:* 1¼″, long-throw sealed copper-ribbon. *Rated ance:* 8 ohms.





Our biggest value in a three-way 12-inch hi-fi Speaker . . has 1¾-lb. ceramic magnet

39⁹⁵ *Rugged design and massive magnet/voice coil structure deliver stunning hi-fi!*

Model 888HCA. A great performer which belongs with even the most expensive component systems. Superior components deliver natural full-range sound. Features heavy-duty 12-inch high-compliance woofer with massive 1¾ lb. ceramic magnet and large 1½″ copper-ribbon voice coil for soul-satisfying bass down to 25 Hz. Axially-mounted midrange cone radiates middle frequencies from 2000 Hz to 4000 Hz with startling hi-fi realism. Compression-type horn-loaded tweeter disperses clean, sparkling treble up to 19,000 Hz. Has built-in mechanical and electrical crossovers. Rugged die-cast frame locks voice coils in precise alignment for extra durability. Level control adjusts tweeter output to suit listening room's acoustics or personal preference. Mounting depth, 6⅜″.
20 A 9753 X. Shpg. wt., 11½ lbs. 39.95

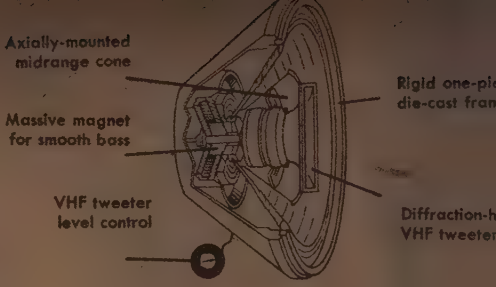
SPECIFICATIONS

Resonant Frequency: 25 Hz. *Response:* 25-19,000 Hz. *Capacity:* 25 watts, 50 watts peak. *Crossovers:* Mechanical, 2000 Hz; electrical, 4000 Hz. *Magnets:* Woofer, 1¾-lb. ceramic; tweeter, 4.65-oz. Alnico V. *Flux:* Woofer, 12,650 gauss; tweeter, 13,500 gauss. *Voice Coils:* Woofer, 1½″; tweeter, 1″. *E.I.A. Sensitivity:* 53 dB. *Impedance:* 8 ohms.

VALUE makes this our best-selling Allied 12" Speaker

Quality design and construction of all three elements . . . you get natural high-fidelity sound at a budget-minded price

24^{95}


Axially-mounted midrange cone
Massive magnet for smooth bass
VHF tweeter level control
Rigid one-pi
die-cast fran
Diffraction-h
VHF tweeter

Allied's low price, plus 3-way design w
VHF horn . . our "best value" 12" Spea

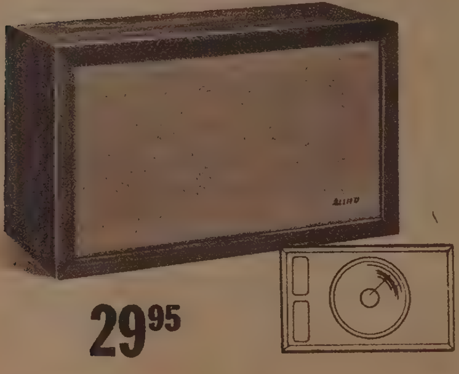
Model 830BHC. This popular three-way 12-inch h
fidelity speaker is loaded with many engineering refinem
to give you true hi-fi sound at a thrifty price. Rigid, die-
alloy frame locks voice coils and other moving part
perfect alignment for extra durability and better perf
ance. Low free-air resonant frequency permits excel
bass response from any good enclosure—Model
enclosure recommended (below).

The husky, high-compliance 12-inch woofer has an o
size, long-excursion copper-ribbon voice coil and pow
13-oz. ceramic magnet for solid, satisfying bass dow
25 Hz. Axially-mounted midrange cone covers the mi
frequencies from 2000 Hz to 3500 Hz with outstan
hi-fi realism. Compression-type, diffraction-horn V
tweeter disperses clear, brilliant treble over the wi
possible area for truly "big" hi-fi sound. Overall frequ
response is from 25 Hz to 18,000 Hz.

Mechanical and electrical crossovers at 2000 Hz and
Hz divide the audio frequency spectrum for the smoot
response. Precision-calibrated tweeter level control adj
the treble response to suit individual room acoustic
personal taste. Convenient binding post terminals a
easy, solderless connection of the speaker to your ampl
in a matter of seconds. Mounting depth only 5¼".
20 A 9707 X. Shpg. wt., 10½ lbs. 2

SPECIFICATIONS

Free-Air Resonant Frequency: 30 Hz.
Frequency Response: 25-18,000 Hz.
Power Capacity: 20 watts, 40 watts peak.
Magnet Weight: Woofer, 13-oz.; tweeter, 1.47-oz.
Magnetic Material: Woofer, ceramic; tweeter, Alnico
Crossover Frequencies: Mechanical at 2000 Hz; electrical at 3500 Hz.
Flux Density: Woofer, 9750 gauss; tweeter, 7000 gau
Voice Coils: Woofer, 2"; tweeter, 1".
Rated EIA Sensitivity: 45 dB.
Impedance: 8 ohms.



29^{95}

Allied factory-assembled tapered-port bass reflex 12-inch Speaker Enclosure

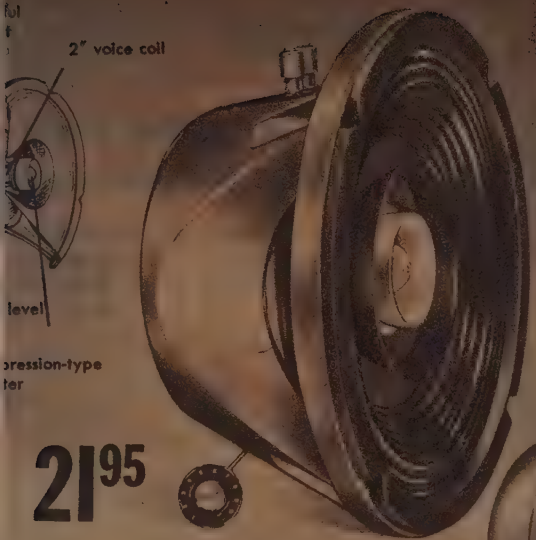
Model 1286. Tastefully finished, factory-assembled 12-
speaker enclosure is the perfect choice for those who
to mount their own speakers with minimal expense.
1286 features the time-tested tapered-port bass re
enclosure for maximum efficiency, low cost and ea
speaker installation. Improves bass response and perfo
ance of any 12-inch speaker—the perfect match for
Allied 830BHC listed above.

Has deluxe construction and compact, space-saving
Constructed of sturdy ¾" wood with a handsome waln
veneer finish on all four sides of cabinet. Insulated
fiberglass to prevent annoying resonance. Has r
mounted two-lug terminal strip for easy phasing and c
nection of the speaker system to your amplifier. S
14¾x24x12". Shpg. wt., 31¾ lbs.
20 A 9731 X. 2

Allied speakers give you more for your dol

Allied 8″ speakers . . quality sound for compact hi-fi systems

Feature deluxe construction, wide response and quality features that give you the most value for your hi-fi dollar



21⁹⁵

ied's best 8″ Speaker features 3-way esign for great hi-fi at a low price

839. Our finest 8″ high-fidelity speaker. Performs 12″ speaker, yet it's actually priced lower than many Ultracompact size, only 3⅞″ deep, makes it an ideal for wall or custom mounting. Three-way design for nt sound in any good 8″ speaker enclosure—we recnd using the Allied 1295K speaker enclosure kit listed

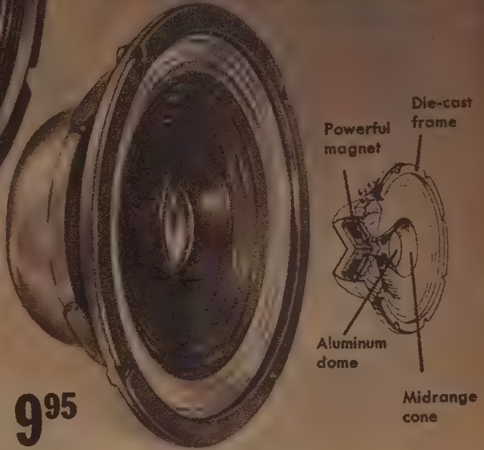
compliance 8″ woofer with outsize 2″ voice coil and ful 10-oz. ceramic magnet delivers solid bass down to . Midrange cone covers the range from 2000 Hz to Hz with excellent fidelity. Compression-type tweeter ses distortion-free treble up to 18,000 Hz. Level ol adjusts tweeter output. Built-in crossovers at 2000 d 4000 Hz. Screw-type binding post terminals allow asy connection of the speaker to your amplifier.
700. Shpg. wt., 7 lbs. 21.95

SPECIFICATIONS

ee-Air Resonant Frequency: 65 Hz.
equency Response: 45-18,000 Hz.
ossover Frequencies: Mechanical at 2000 Hz; electrical at 4000Hz.
ower Capacity: 20 watts, 40 watts peak.
agnets: Woofer, 10-oz. ceramic; tweeter, 1.47-oz. Alnico V.
oice Coil: Woofer, 2″; tweeter, 1″.
ated Impedance: 8 ohms.
ounting Depth: 3⅞″.
ctual Weight: 6 lbs.

d 8-inch walnut Speaker Enclosure Kit

1295K. Absolutely the best value we have in a shelf-8-inch speaker enclosure kit. Features ducted-port reflex design for maximum efficiency and smooth bass nse. For floor or shelf use; can be placed vertically or ontally. Constructed of ¾″ wood with smart walnut r on all sides. Rub in finishing oil (not included) for some oiled walnut finish. Fiberglass insulated; has inal strip for connection to your amplifier. With uctions. Size, 11x24x9″.
9721 X. Shpg. wt., 16 lbs. 16.95



9⁹⁵

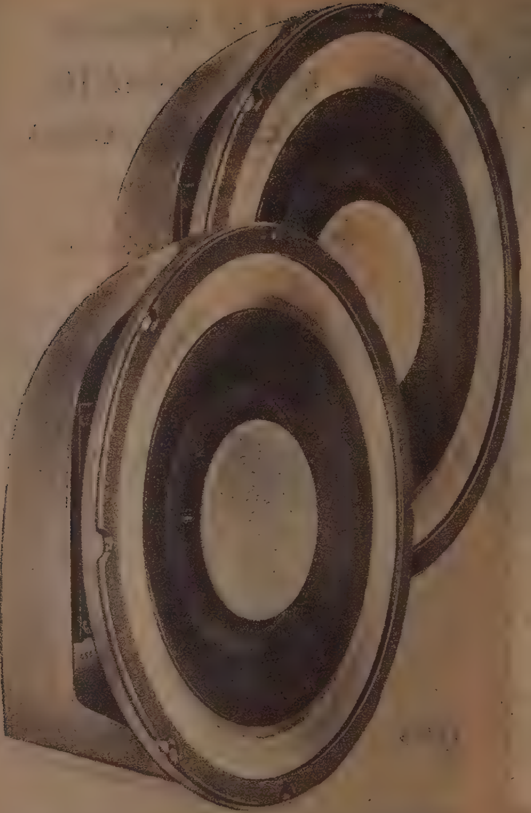
Allied's lowest priced 8-inch two-way Speaker for audio buffs on a tight budget

Model 809HC. An unmatched value for compact or low-cost stereo systems. Compact size, only 3⁵⁄₁₆″ deep, makes it the perfect choice for wall or custom mounting. Will deliver excellent performance with the Allied 1295K 8″ speaker enclosure listed below.

Specially-designed 8″ high-compliance woofer is coupled to 1″ voice coil and powerful 10-oz. ceramic magnet for natural bass down to 40 Hz. Separate midrange cone with aluminum dome radiator covers the important middle frequencies and the treble range.

Rigid, die-cast alloy frame locks voice coil and other moving parts in precise alignment for years of trouble-free, dependable performance. Power capacity, 15 watts (30 watts peak). Frequency response, 40-13,000 Hz. Impedance, 8 ohms. Binding post terminals for quick connection to your amplifier.
20 A 9750. Shpg. wt., 3¾ lbs. .9.95

16⁹⁵



Special Purchase

Utah's best selling 3-way 12
. . priced extra-low in pairs

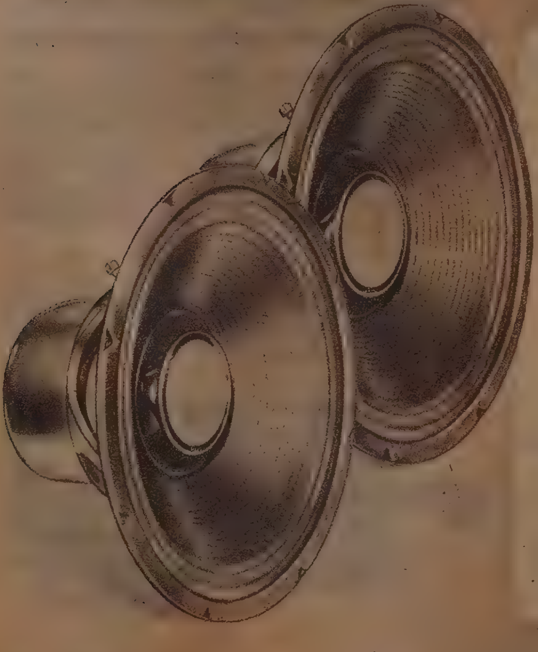
One Speaker	Two Speakers
34^{95}	35^{95}
$5 monthly*	$5 monthly*

- Cloth-roll suspension woofer for smooth respo
- 4½-lb. magnet structure • 1½" voice coil
- Die-cast frame locks elements in alignment

Model C12PC-3B. Order a pair of these popular "Cele
speakers and get full-range stereo hi-fi at a special
Allied price. Superbly crafted. Cloth-roll suspen
woofer and 1½" copper voice coil for smooth, rich
response as low as 25 Hz. Midrange cone produces c
distinct middle frequencies. Tweeter, with Alnic
magnets, delivers brilliant highs to 20,000 Hz. Cr
overs at 1000 and 3500 Hz.

Features rugged die-cast frame that locks speaker
ments in perfect alignment for years of trouble-
performance. Large windows in frame permit maxin
cone travel. Internal dust seal protects voice-coil
Fits most slim-line enclosures—modern shallow pr
for mounting depth of only 5$\frac{11}{16}$". Convenient spr
loaded fingertip speaker terminals are color-coded
easy phasing. Impedance, 8 ohms. Capacity, 45 w
peak. Shpg. wt. each, 12¼ lbs.

20 A 8229 X. . . . . One Speaker 3
Two Speakers. 3



Utah 3-way 15" Speaker
. . buy a pair for stereo

One Speaker	Two Speakers
39^{95}	40^{95}
$5 monthly*	$5 monthly*

- 15-inch woofer delivers bass down to 20 Hz
- Anodized aluminum screen protects tweeter

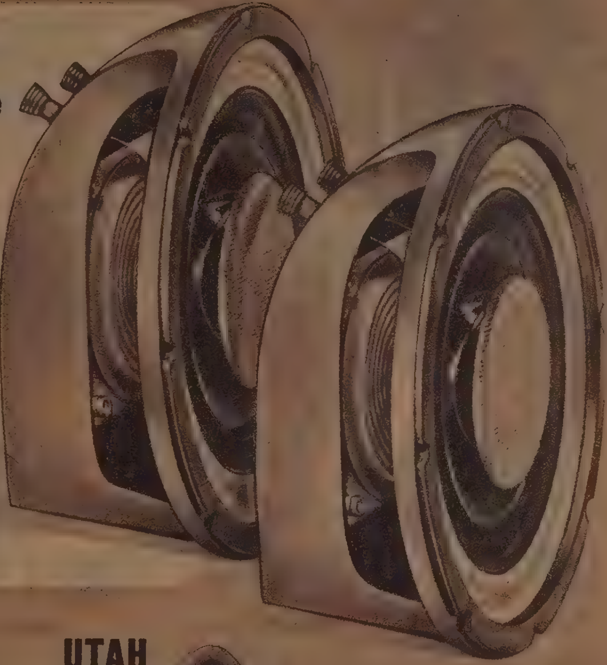
Model D15PXC-3. Take advantage of Allied's ama
low price on a pair of these magnificent speakers.
unbeatable value in quality and performance. Giga
15-inch woofer with a 1⅞-lb. ceramic magnet deli
astonishingly rich bass response to 20 Hz w
out booming. Built-in 4" tweeter covers the midra
and high frequencies up to 18,000 Hz with spark
clarity. Anodized aluminum screen protects the twe
from damage. Spring-loaded phase-coded terminals
fast, easy installation. Impedance, 8 ohms. 45-w
peak power handling capacity. Mounting depth,
Shpg. wt. each, 12 lbs.

20 A 8230 X. . . . . One Speaker 3
Two Speakers. 4

**Full Credit details on page 438 . . buy with no money do*

f popular Utah and Altec Lansing Speakers

two Utah 3-way 8″ kers at this low price



Speaker
8⁹⁵

Two Speakers
19⁹⁵

Buy a pair for $5 monthly*

8JC3. Get two of these excellent 3-ni-fi speakers at this money-saving ce. Cloth-roll suspension woofer -oz. ceramic magnet produces rich, s down to 35 Hz; midrange cone s clear middle frequencies; tweeter nico V magnet delivers pure, un-d highs up to 20,000 Hz.

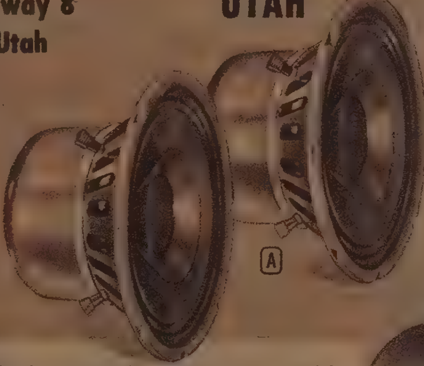
lie-cast frame has large windows to maximum cone travel. Internal al protects voice-coil gap. Spring-color-coded terminals for easy , 30 watts peak. Impedance, 8 Shpg. wt. each, 5½ lbs.
14. . . . . **One Speaker 18.95**
eakers. 19.95

Sensational value! l-response 2-way 8″ Speaker by Utah

UTAH

e Speaker
10⁷³

o Speakers
11⁷³

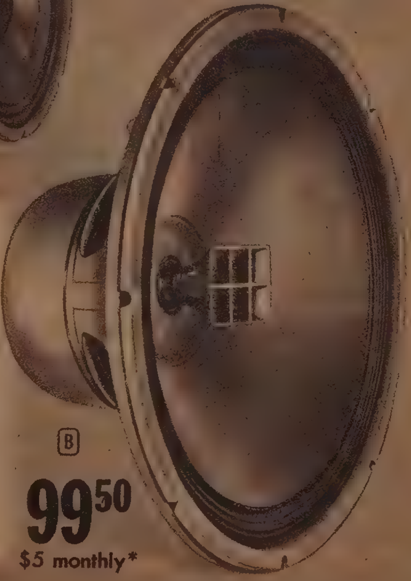


del D8LA. Get a pair of two-way 8″ speakers at this special Allied price—great for budget systems. Dual-diameter Alnico gnet, 1¼″ voice-coil plus treated cone edge woofer assure ingly good bass response down to 40 Hz. Whizzer cone sup-rilliant highs to 16,000 Hz. Capacity, 25 watts peak. Im-e, 8 ohms. 4″ deep. Shpg. wt. each, 4 lbs.
437. One Speaker. . . . . 10.73 Two Speakers. 11.73

ALTEC-LANSING

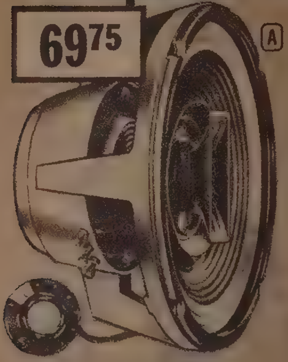
ecial purchase! Altec-Lansing 2-way 15″

del 602D. Outstanding value on this superb 15-inch two-way xial speaker. Features high-compliance woofer with 3″ voice-d 10½-lb. magnet structure for deep, resonant bass all the own to 20 Hz. Compression driver and cast-zinc horn with 9° dispersion distributes sparkling highs to 22,000 Hz. Cast-num frame. Built-in crossover; level control. Capacity, 25 Impedance, 8 ohms. 7″ deep.
220 X. Shpg. wt., 21 lbs. **99.50**



99⁵⁰
$5 monthly*

Popular 3-way 12" high-fidelity Speaker


69^{75}

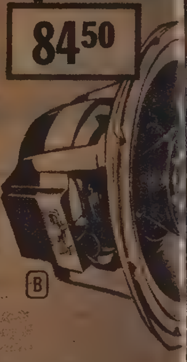
(A)

(A) Electro-Voice 12TRXB with horn tweeter

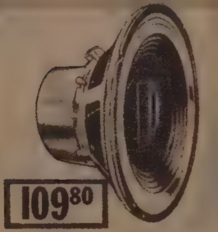
World-famous speaker designed to delight the most critical listener. Combines powerful 12" woofer with 1⅓-lb. magnet, Radax midrange, and wide-dispersion horn tweeter. Beautiful tone from a deep 35 Hz to bell-like 20,000 Hz. 60 watts peak. Level control. Crossovers: mechanical, 2000 Hz; electrical, 3500 Hz. Impedance, 16 ohms. 7" deep. Shpg. wt., 16 lbs.
20 A 8137 X.................69.75

(B) University 312 high-compliance model

University's most popular and best-selling 3-way speaker. High-compliance 12" woofer; "Diffusicone" midrange, and exclusive "Sphericon" coaxially mounted tweeter with reflector baffle. Self-contained electrical crossover with integral brilliance control. 1000 Hz mechanical and 3000 Hz electrical crossover. 28-40,000 Hz. 35 watts. 8 ohms. 6⅝" deep.
20 A 8006 X. Shpg. wt., 10¼ lbs...............84.50

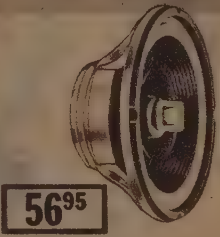

84^{50}

(B)


109^{80}

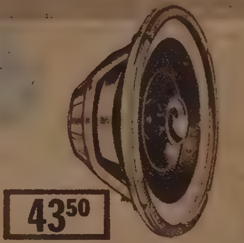
Electro-Voice 12TRX

E-V's finest 12" 3-way speaker. Superb full-range sound from 30 Hz to beyond audio range. Powerful 12" woofer with 3-lb. magnet, Radax midrange, wide-dispersion tweeter. 2000, 3500 Hz crossovers. 80 watts peak. Impedance, 16 ohms. 7½" deep. Shpg. wt., 25 lbs.
20 A 8138 U.........109.80


56^{95}

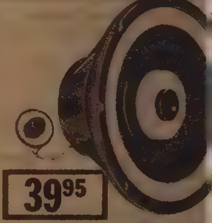
Jensen SG-220

Big 12" woofer with 1-lb. magnet for rich bass down to 20 Hz. Midrange frequencies handled by a smooth midrange radiator. Wide-dispersion super tweeter for brilliant highs. Response, 20-18,000 Hz. 20 watts. Impedance, 8 ohms. Size, 5⅞" deep. Shpg. wt., 12 lbs.
20 A 8374 X..........56.95


43^{50}

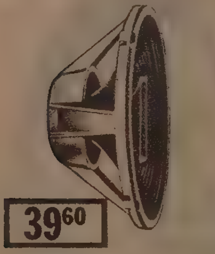
Jensen DL-220

Provides excellent hi-fi sound in any enclosure. Big 12" woofer with 1-lb. magnet delivers full bass. Midrange radiator, compression tweeter. Frequency response, 25-17,000 Hz. Power capacity, 20 watts. Impedance, 8 ohms. Size, 5½" deep. Shpg. wt., 10 lbs.
20 A 8376 X.........43.50


39^{95}

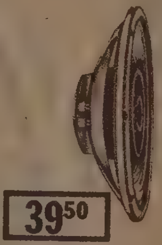
Utah R12PC-HF

Features rich-soun
12" woofer with cloth-
suspension. Midra
cone and coaxially-mo
ed tweeter. Rigid, die-
frame is shaped for m
mum strength. Level
trol. Response, 22-20
Hz. Capacity, 45 w
peak. 8 ohms. 5⅞" d
Shpg. wt., 13 lbs.
20 A 8317 X.........3


39^{60}

Electro-Voice LT-12

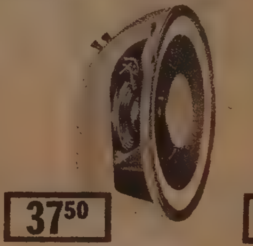
High-quality popular E-V speaker has big 12" woofer with 12-oz. magnet, Radax midrange and horn tweeter. Offers full bass response and superb highs. Response: 40-18,000 Hz. Power handling capacity, 40 watts peak; Impedance, 8 ohms. 5¼" deep. Shpg. wt., 9 lbs.
20 A 8120 X........39.60


39^{50}

Slim
Line
Design

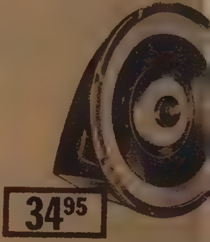
University M-12T

A fine 12" speaker for superb low and mid-frequency reproduction, plus "Sphericon" tweeter that extends highs beyond audibility with extra-wide dispersion. Frequency response, 35-40,000 Hz. Power capacity, 30 watts. Impedance, 8 ohms. 3⅞" deep. Shpg. wt., 9 lbs.
20 A 8280 X.........39.50


37^{50}

Utah C12PC-3C

One of Utah's newest and finest hi-fi speakers. Full 12" woofer with cloth roll suspension. Midrange cone and coaxially mounted tweeter. Baked on lacquer finish. Die-cast frame. 23-20,000 Hz. Capacity, 45 watts peak. 8 ohms. 5$^{11}/_{16}$" deep. Shpg. wt., 12 lbs.
20 A 8318 X.........37.50


34^{95}

Utah C12PC-HF

Full 12" woofer with c
roll suspension and
lb. ceramic magnet br
you smooth bass dow
25 Hz. Compression
tweeter brings highs
20,000 Hz. Asymme
frame. 45 watts peak
pacity. Impedance
ohms. Size, 5$^{11}/_{16}$" d
Shpg. wt., 12 lbs.
20 A 8240 X.........3

2-way 12" high-fidelity Speakers

ecial Purchase! Utah 12″ Speakers

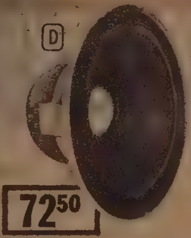
e
ker **28.50** $5 monthly*

Two Speakers **29.50** $5 monthly*

Utah speakers for little more than the price of aker. Feature 12″ cloth roll suspension woofer -inch voice coil and 1¼-lb. ceramic magnet. s rich, deep bass down to 23 Hz. Coaxially- d cone smoothly reinforces the all-important frequencies of the orchestra and reproduces o 19,000 Hz. Mounts on front or rear of baffle Power capacity, 45 watts peak. Impedance, 8 Solderless color-coded terminals. 5⅞″ deep. wt., each, 12 lbs.

02 X. One Speaker......................28.50

eakers......................29.50



A Altec-Lansing 601D

woofer with 9½-lb. magnet structure. F driver, multi-cell horn. Level con- . 30-22,000 Hz. 30-watts peak. 8 ohms. ″ deep. Shpg. wt., 18 lbs.

A 8249 X......................112.00

B Jensen SG-223

exair" 12″ woofer, 1¾ lb. magnet, n-loaded reflex tweeter. 20-20,000 Hz. watts. 8 ohms. 6½″ deep. 15 lbs.

A 8382 X......................79.88

C University 6201

Coaxial speaker with separate magnets for woofer and compression tweeter. 28 Hz to beyond audio range. 35 watts. 8 ohms. 6⅝″ deep. Wt., 10½ lbs.

20 A 8009 X......................62.55

D Altec-Lansing 412D

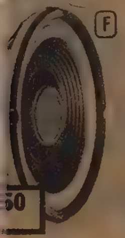
Biflex multiple-compliance design. 12″ woofer. 30-15,000 Hz. 30 watts peak. 8 ohms. 5⅝″ deep. Wt., 16 lbs.

20 A 8324 X......................72.50

E Electro-Voice SP12

Hi-compliance 12″ woofer for great base, has 3-lb. magnet; Radax high-frequency radiator. Crossover at 4000 Hz. Frequency response, 30-15,000 Hz. Power capacity, 80 watts peak. Impedance, 16 ohms. 7½″ deep. Shpg. wt., 21 lbs.

20 A 8130 X........67.50



F Jensen SG-210

lvance design "Flexair" woofer th 1-lb. "Syntox-6″ magnet. Cur- inear-radiator tweeter. Mech. mid- age, 20-16,000 Hz. 20 watts. 8 ms. 5⅞″ deep. Wt., 12 lbs.

A 8201 X......................49.50

G Electro-Voice SP12B

ide-range coaxial reproducer. High mpliance 12″ woofer, Radax super eeter. Response, 35-15,000 Hz. watts peak capacity. 16 ohms. 4″ deep. Wt., 15 lbs.

A 8131 X......................36.00

H Utah R12PC-2C

Combines 12″ woofer with "Open" frame design for maximum cone travel. Response, 20-19,000 Hz. Capacity, 45 watts peak. 8 ohms. 5⅞″ deep. Shpg. wt., 12 lbs.

20 A 8319 X......................28.95

J Utah C12PC-2C

Features big 12″ woofer in a rigid, die-cast frame. Cloth-roll suspension, 23-19,000 Hz. 45 watts peak. Impedance, 8 ohms. 5$\frac{11}{16}$″ deep. Shpg. wt., 11 lbs.

20 A 8316 X......................26.50

K Electro-Voice LS12A

Popular Electro-Voice speaker can double as low-frequency driver. Woofer has 13-oz. ceramic magnet. Radax tweeter. 40-14,000 Hz. 20 watts. 8 ohms. 3$\frac{15}{16}$″ deep. 8 lbs.

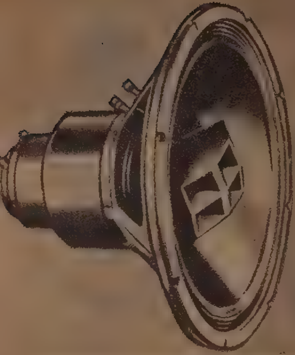
20 A 8476 X......................24.75

L Low-Cost Lincoln L-102

Woofer cone delivers rich bass, whizzer cone, midrange and highs. 1¼-lb.—equivalent Alnico V magnet. 30-14,000 Hz. 20 watts. 8 ohms. 6$\frac{5}{32}$″ deep. Shpg. wt., 6¼ lbs.

20 A 8440 X......................9.95

Full-range 15" hi-fi Speakers



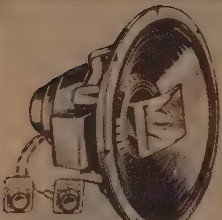
Altec-Lansing studio-quality Speaker with horn tweeter

Quality constructed for outstanding performance across the full audio range

195^{00}

$10 monthly*

Model 604E. Deluxe speaker for the most demanding high-fidelit devotee. "Super-Duplex" two-way 15" hi-fi speaker featur high-compliance cone with massive 27-lb. dual magnet structu with Alnico V magnets. Boasts wide-range, distortion-free respons Widely used in professional recording and broadcast monitorin Coaxially-mounted multicellular high-frequency horn gives supe 40°x90° dispersion. Dual full-section 1500 Hz crossover networ Level control. Frequency response from 20 to 22,000 Hz. Pow handling capacity, 35 watts. Impedance, 8-16 ohms. Depth, 11⅛
20 A 8215 U. Shpg. wt., 40 lbs. 195.0



189^{50} $10 monthly*

University 315C

Three-way speaker features 15" theater-type woofer with heavy-duty 6½-lb. Alnico V magnet and special anti-breakup diaphragm. Diffusicone midrange; compression horn tweeter. 25 Hz to beyond audio range. 50 watts. Two level controls. 8 ohms. 12" deep. 35 lbs.
20 A 8008 U. 189.50

119^{70} $6 monthly*

Electro-Voice 15TRX

Electro-Voice's finest, most popular three-way 15" speaker. Boasts woofer with 4⅝-lb. ceramic magnet; exclusive Radax propagator; plus horn-loaded super-tweeter with 6.8-oz. Alnico V magnet. Brilliance control. 25-20,000 Hz. 40 watts. 16 ohms. 8¼" deep. 30 lbs.
20 A 8136 U. 119.70

82^{50} $5 monthly*

Altec-Lansing 415C

Fine value in a full-range two-way 15" speaker. Employs exclusive "Biflex" multiple compliance for unusually wide frequency range. Has 3" voice coil. Durable cast-aluminum frame. Response from 25 to 14,000 Hz. Power capacity, 25 watts. 8 ohms. Depth, 7". 19 lbs.
20 A 8211 X. 82.50

74^{70} $5 monthly*

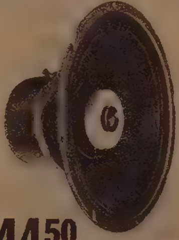
Electro-Voice 15TRXB

Quality three-way design for magnificent sound over the entire audio range. 15" woofer has 1¾-lb. ceramic Indox magnet. Radax-type midrange cone. Wide-dispersion horn-type super-tweeter. Brilliance control. Response, 30-20,000 Hz. Peak power, 60 watts. 16 ohms. 9" deep. 18 lbs.
20 A 8070 X. 74.70

45^{00} $5 monthly*

Electro-Voice SP15B

Fine value in a moderately low-priced radax coaxial hi-fi speaker. Features giant 15" woofer with 1⅜-lb. ceramic magnet for smooth, rich bass to 30 Hz. Built-in crossover at 3500 Hz to high-frequency cone. Frequency response, 30-15,000 Hz. Peak power capacity, 60 watts. Impedance, 16 ohms. 9" deep. Shpg. wt., 16 lbs.
20 A 8282 X. 45.00



44^{50} $5 monthly*

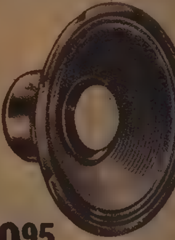
Utah G15RXC-HF

Three-way speaker features powerful 15" woofer that delivers thunderous bass to 30 Hz. Compression horn tweeter. Spring loaded, finger-tip terminals are color coded for easy stereo phasing. Smooth, clear response from 30 to 20,000 Hz. Peak power handling capacity, 50 watts. 8 ohms. 8" deep. 13 lbs.
20 A 8320 X. 44.50

29^{70} $5 monthly*

Electro-Voice LS15

Here's an exciting value in a two-way 15" speaker. Features E-V's famous "Wolverine" crossover and Radax propagator. Provides a smooth frequency response from 30 to 14,000 Hz. Built-in crossover at 4500 Hz. Power handling capacity is 20 watts (40 watts peak). Impedance is 8 ohms. Depth, 6$\frac{11}{32}$". 11 lbs.
20 A 8123 X. 29.70



19^{95} $5 monthly*

Lincoln L-155

Three-way 15" hi-fi speaker at a sensational low price. Excellent for budget stereo systems. Woofer has 1½" voice coil, 1¼-lb. magnet. Whizzer cone and tweeter for clear mid-frequencies and pure highs. Frequency response, 25-18,000 Hz. Peak power capacity, 40 watts. Impedance, 8 ohms. 8" deep. Wt., 10 lbs.
20 A 8160 X. 19.95

SHIPPING NOTE: Items with suffix U, W or Z in stock no. are sent tru or express. See Ordering Information pages.

Value-packed 8-inch hi-fi Speakers

Altec-Lansing ultra-slim "Biflex" Speaker

el 755E. Versatile "Biflex" speaker slim that it fits just about anywhere s depth is only 2¼". Compact but erful 8" woofer boasts 1½-lb. ceramic ox V magnet for rich bass without ning. Features multiple concentric pliance suspension. 90° dispersion. oth, clear frequency response from 15,000 Hz. Power capacity, 15 watts. edance, 8 ohms.
8205. Shpg. wt., 7 lbs. 30.75

Convenient slim design allows easy placement

30^{75}

$5 monthly*

32^{50}

A **31^{95}**

B **29^{70}**

University "Diff-8"

Popular "Diffusicone-8" wo-way 8" "Difaxial" peaker features high-efficiency woofer with multi-element "Diffusicone" midrange. Superb wide-angle treble dispersion. 0-15,000 Hz. 35 watts. 8 hms. 4$\frac{5}{16}$" deep.
0 A 8010. 5 lbs. 32.50

A Electro-Voice three-way Speaker

Model LT8. Woofer, midrange cone, and tweeter with ring diaphragm. Response, 45-18,000 Hz. 40 watts peak power. 8 ohms. Depth, 3$\frac{15}{16}$".
20 A 8314. Shpg. wt., 7 lbs. 31.95

B Electro-Voice Radax coaxial Speaker

Model SP88. Two-way speaker has 1⅜-lb. ceramic magnet. 35-15,000 Hz. Peak power capacity, 40 watts. 16 ohms. Depth, 4¾".
20 A 8315. Shpg. wt., 9 lbs. 29.70

Special Purchase

University three-way

Cut $12.80 **29^{95}**

Model 308. *Was $42.75.* This is the 8" version of the famous University 312. Three-way speaker boasts true coaxial construction. Features high-efficiency woofer, multi-element diffusicone midrange section, and compression-driven, wide-angle reciprocating flare horn tweeter.

Electrical crossover network at 5000 Hz, mechanical crossover network at 1000 Hz. Frequency response, 30-17,000 Hz. Power handling capacity, 35 watts. Impedance, 8 ohms. 6⅛" deep. Shpg. wt., 7½ lbs.
20 A 8011. . . . . .29.95

24^{95}

D **20^{50}**

E **19^{80}**

F **18^{95}**

G **15^{75}**

H **15^{75}**

C Utah cloth roll suspension three-way

Model R8JXC-3. Can be mounted from front or rear of baffle board. Rigid die-cast frame. Response, 30-20,000 Hz. 32 watts peak. 8 ohms. Depth, 3⅝".
0 A 8322. Shpg. wt., 5 lbs. 24.95
0 A 8323. Model R8JXC-2. As above, but 2-way instead f 3-way. Response, 30-19,000 Hz. Wt., 4¾ lbs. . .17.95

D Jensen two-way Speaker

Model SG80. Moderately-priced two-way speaker features dual-cone design and ⅝-lb. magnet for clear, crisp performance. Response, 40-15,000 Hz. Power capacity, 5 watts. Impedance, 8 ohms. 3⅝" deep.
0 A 8388. Shpg. wt., 5 lbs. 20.50

E Electro-Voice two-way Speaker

Model LS8. Versatile speaker can be mounted conveniently in ceiling, wall and thinline enclosures. Woofer plus Radax midrange/high-frequency cone. Boasts smooth response from 45 to 14,000 Hz. Peak power capacity, 40 watts. Impedance, 8 ohms. 3½" deep.
0 A 8124. Shpg. wt., 5 lbs. 19.80

F Utah "Celesta" three-way Speaker

Model C8JC-3C. Features efficient 8" woofer with accordion-pleated cloth roll suspension for smooth bass, midrange cone, coaxially mounted tweeter. Pressure-cast frame for lasting alignment of critical parts. 35-20,000 Hz. 30 watts peak. 8 ohms. 3$\frac{9}{16}$" deep.
20 A 8321. Shpg. wt., 5½ lbs. 18.95

G Jensen low-cost two-way Speaker

Model DL80. Dual-cone high-fidelity speaker features compact but powerful 8" woofer and radiator cone-type tweeter. Frequency response, 45-15,000 Hz. Power capacity, 15 watts. Impedance, 8 ohms. Depth, 3⅞".
20 A 8389. Shpg. wt., 4 lbs. 15.75

H Electro-Voice bargain-priced two-way

Model MC8. Features efficient 8" woofer with ceramic magnet structure. Has radax midrange and high-frequency cone to assure surprisingly extended highs and wide dispersion at a low price. Response, 50-13,000 Hz. Peak power capacity, 24 watts. 8 ohms. 3$\frac{3}{16}$" deep.
20 A 8472. Shpg. wt., 5 lbs. 15.75

Custom hi-fi and outdoor Speakers

Outdoor hi-fi Speakers

Utah 8″ two-way Patio Speaker

Model HFOD-8A. Two-way 8″ speaker in weatherproof drawn steel green cabinet. Volume control. Response: 35-19,000 Hz. Capacity: 15 watts. 8 ohms. With 25′ cable. 10⅞x10⅞x5⅜″.
20 A 8448 X. Wt., 7 lbs. **13.95**

Electro-Voice Sonocaster I

Lightweight and rugged. Versatile for extension or portable use. Radax coaxial 8″ speaker. Molded black housing. 70-13,000 Hz. 30 watts peak. 8 ohms. 16¾x17x5⅞″.
20 A 7237 X. Wt., 7 lbs. **22.50**

Electro-Voice Musicaster IA

Weatherproof 12″ dual-cone Radax wide-range driver. Compression molded housing. 80-10,000 Hz. 30 watts; 60-W peak. 8 ohms. 21½x21½x8½″.
12 A 7044 U. Wt., 29 lbs. **69.90**
12 A 7479 U. Musicaster IIA. Above; VHF driver. 16,000 Hz. 31 lbs. . . **88.50**

Altec Patio Speaker System

Model 829A. 8″ wide-range, high-compliance speaker for smooth response, 40-15,000 Hz; wide angular dispersion. Infinite baffle enclosure of hi-impact Kydex®. 8 ohms. 60-W peak. 17⅞x14⅞x12½″. Chrome plated stand.
20 A 8246 U. Wt., 10½ lbs. **77.50**

Acoustic-suspension Speaker

Utah 5″ full-range Speaker

Model CS5JFC. Cloth-roll acoust
suspension speaker performs like
much larger model. 1¾-lb. magn
structure; ¾″ voice coil. 65-17,000 H
18 watts peak. 8 ohms. 2⅛″ deep.
20 A 8163. Wt., 2 lbs. . . . . **6.**

Utah 6″ full-range Speaker

Model CS6JCW. Acoustic-suspensi
2-way 6″ speaker features compa
size, big sound. 10-oz. barium-ferri
magnet. Response, 50-17,000 Hz.
watts peak. 8 ohms. 2⅝″ deep.
20 A 8222. Wt., 2 lbs. . . . . **7.**

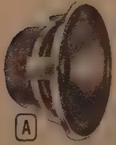
Utah 8″ full-range Speaker

Model CS8JCW. Two-way 8″ speak
has truly amazing response for its si
Coaxial high-frequency cone; clot
roll suspension. Response, 30-20,0
Hz. 30 watts peak. 8 ohms. 3″ dee
20 A 8223. Wt., 2¾ lbs. . . . . **8.**

Utah 12″ and 15″ Woofers

12″ Model V12RXC-7. Features 1⅞-l
ceramic magnet; 2″ voice coil; clot
roll suspension. 25-2500 Hz. 30 wat
60 peak. 8 ohms. 5″ deep.
20 A 8325 X. Wt., 9 lbs. . . . . **23.**
15″ Model V15RXC-5. Above, but 2
2500 Hz. 35 watts, 70 peak. 6½″ dee
20 A 8328 X. Wt., 12 lbs. . . . . **28.**

Altec-Lansing Woofers



A **Altec 406B 10″ Woofer.** Lightweight cast aluminum frame. 9-lb. 7-oz. magnet structure. Exceptional response, 25-4500 Hz. 25 watts. 8 ohms. 5¼″ deep.
20 A 8214 U. Shpg. wt., 16 lbs. **56.00**

B **Altec 414B 12″ Woofer.** 9-lb. 7-oz. magnet structure. 3″ edge-wound voice coil; cast aluminum frame. Response, 30-4000 Hz. 25 watts. 16 ohms. 5⅝″ deep.
20 A 8247 U. Shpg. wt., 16 lbs. **58.00**

C **Altec 416A 15″ Woofer.** 10-lb. 8-oz. magnet structure. 3″ edge-wound copper ribbon voice coil. Cast aluminum frame. 20-1600 Hz. 30 watts. 16 ohms. 7″ deep.
20 A 8221 U. Shpg. wt., 19 lbs. **62.00**

Altec 4″ Mini-Speaker

Model 405A. Compact full-range speaker for high-fidelity or car tape systems. Water-resistant cone. Response, 60-15,000 Hz. 10 watts. 8 ohms. 2⅛″ deep.
20 A 8065. Shpg. wt., 3 lbs. **12.00**

Lincoln Midrange-Tweeter

Model L-104. Exceptional Allied value! Has 1-oz. Alnico V magnet, 5000 Hz crossover. Response, 3500-16,000 Hz. Capacity, 15 watts. 8 ohms. 1$\frac{9}{16}$″ deep.
20 A 8442. Shpg. wt., 8 oz. **1.99**

Popular 15″ and 12″ Woofers

D **University C15W 15″.** Twin suspension 14-lb. magn
structure; dual voice coil. Response, 25-1500 Hz. Capa
ity, 50 watts. Impedance; 4-20 ohms. 10½″ deep.
20 A 8025 U. Shpg. wt., 27 lbs. **109.**

University C15HC 15″. (Not illus.) 10-lb. magnet structu
dual voice coil. 18-800 Hz. 60-W. 4-20 ohms. 8⅛″ deep.
20 A 8026 U. Shpg. wt., 25 lbs. **97.**

University C-12HC 12″. (Not illus.) 8-lb. magnet structu
dual voice coil. 20-3000 Hz. 50-W. 4-20 ohms. 6⅞″ dee
20 A 8027 X. Shpg. wt., 14 lbs. **57.**

E **Jensen W15-LF 15″.** "Flexair" design with 3½-lb. ma
net. 16-2000 Hz. 45 watts. 8 ohms. 8″ deep.
20 A 8301 X. Shpg. wt., 15½ lbs. . . . . **92.**

Jensen W12NF 12″. (Not illus.) "Flexair" suspension; 1
lb. magnet. 20-2000 Hz. 35 watts. 8 ohms. 7½″ deep.
20 A 8300 X. Shpg. wt., 9¼ lbs. **52.**

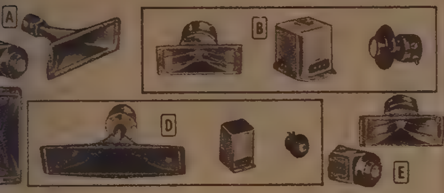
F **Lincoln L-109 15″.** Has 20-oz. equivalent dual-diame
magnet; 1½″ voice coil. Response, 24-4500 Hz. Pow
capacity, 30 watts. 8 ohms. 7⅞″ deep.
20 A 8445 X. Shpg. wt., 9 lbs. **15**

Lincoln L-112 12″. (Not illus.) 20-oz. equivalent magnet; 1
voice coil. 30-4000 Hz. 25 watts. 8 ohms. 6¼″ deep.
20 A 8444 X. Shpg. wt., 7½ lbs. **12**

SHIPPING NOTE: Items with suffix U, W or Z in stock no. sent tr
or express. See Ordering Information pag

peaker System Components and Accessories

ELECTRO-VOICE Speaker Accessories



lectro-Voice HF-1 Tweeter Package.** Wide-angle tweeter; 3500 Hz crossover; level control; wiring. 0 Hz to beyond audio range. 25 watts. 8 ohms.
A 8128. Shpg. wt., 3 lbs. 27.90

-V BB-1 Deluxe Tweeter Package. T35 tweeter; X36 crossover; AT37 control. 3500-20,000 Hz. 40 watts. pedance, 16 ohms.
A 8113. Shpg. wt., 6 lbs. 49.50

-V T-35 Tweeter. Response: 3500 to 20,000 Hz. Capacity, 40 watts. Impedance, 16 ohms.
A 8142. Shpg. wt., 3 lbs. 28.80

lectro-Voice BB-4 Package. Complete with: T25A driver; 8HD diffraction horn; X8 crossover; AT37 trol; wiring. 80-3500 Hz. 40 watts. 16 ohms.
A 8114 X. Shpg. wt., 16 lbs. 99.00

lectro-Voice MF1 Midrange Speaker Package. Includes: MR-10 treble driver; CR-10 crossover; level trol; wiring. 1000-3500 Hz. 20 W. 8 ohms.
A 8129 X. Shpg. wt., 5 lbs. 29.70

ALTEC "Voice of the Theater" Components

F **Altec-Lansing 511B H.F. Sectoral Horn.** 500 Hz to beyond audio range. 90°x40° dispersion. 18½" deep.
20 A 8234 U. Shpg. wt., 18 lbs....................44.50

G **Altec-Lansing 802D H.F. Driver.** 500-22,000 Hz. Couples to 511B horn. 30 W. 16 ohms. 3$\frac{11}{16}$" deep.
20 A 8233. Shpg. wt., 9 lbs....................71.50

H **Altec-Lansing 3000H H.F. Speaker.** Multicell horn, driver. 3000-22,000 Hz. 20 W. 8 ohms. 4$\frac{5}{16}$" deep.
20 A 8237. Shpg. wt., 2 lbs....................39.50

J **Altec-Lansing N-500G Crossover.** Two-section crossover for 802D driver divides at 500 Hz. 16 ohms.
20 A 8236. Shpg. wt., 9 lbs....................53.00

K **Altec-Lansing N-3000E Crossover.** 3000 Hz crossover for 406B or 414A woofer and 300H tweeter. 8 ohms.
20 A 8238. Shpg. wt., 2 lbs....................20.50

L **Altec-Lansing 100A Bass Energizer.** Boost low-end bass 6 dB. Begins at 150 Hz, optimum at 50 Hz.
20 A 8218. Shpg. wt., 1 lb....................25.00

JENSEN Speaker Accessories

M
N
P
R
S
Jensen

ensen Model TP35-V Direct Radiating Tweeter. Engineered with 3½" diaphragm. Frequency response, 2000 Hz to 00 Hz. Power handling capacity rated at 25 watts. pedance, 8 ohms.
A 8302. Shpg. wt., ¾ lbs....................5.95

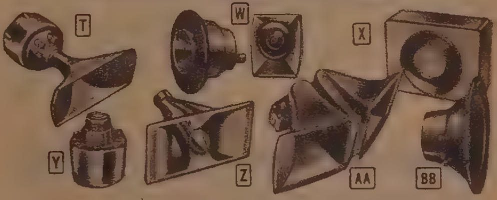
ensen Model TE-40 Sono-Dome® Ultra-Tweeter. For use n 3- or 4-way systems above 4000 Hz response. Full uency response, 4000 Hz to 25,000 Hz. Power handling acity, 35 watts. Impedance, 8 ohms.
A 8303. Shpg. wt., 1½ lbs....................26.96

ensen Model MQ8-R Direct Radiator 8-inch Mid-Frequency Jnit. Closed back permits use in woofer enclosures with- danger of losing fidelity. Frequency response, 600 Hz 000 Hz. Power handling capacity rated at 40 watts. pedance, 8 ohms.
A 8304. Shpg. wt., 4 lbs....................20.93

ensen Model BCL-2 Two-Deck L-Pad. Wirewound with knob and escutcheon. For mid- and high-frequency bal- e adjustments in multi-way speaker systems. Power dling capacity, 45 watts. Impedance, 8 ohms.
A 8307. Shpg. wt., ½ lb....................8.06

ensen Model A6410/8 Crossover Network. For use in 3- or -way speaker systems. Crossover frequencies at 600 Hz, 0 Hz, and optional 10,000 Hz. Power handling capacity, watts. Impedance, 8 ohms.
A 8306. Shpg. wt., 7 lbs....................40.05

UNIVERSITY Speaker Accessories



T **20 A 8051. HF-206 Tweeter.** 2500 Hz to beyond audio range. For 3-way systems, use N-1 Filter, below. Capacity: 50 watts. Impedance, 8 ohms. 6x3$\frac{5}{16}$x6$\frac{9}{16}$". Shpg. wt., 3½ lbs....................39.50

W **20 A 8283. MS Supertweeter.** 3000-40,000 Hz. Crossover, brilliance control. 30 W. 8 ohms. 3⅛x3$\frac{1}{16}$". 1½ lbs. 19.95

X **20 A 8060. T-203W Sphericon Tweeter.** 3000-40,000 Hz. Crossover, brilliance control. Capacity: 30 watts, 8 ohms. Walnut case. 6¾x5¼x2¾". Wt., 2¾ lbs......27.00

20 A 8061. T-202 Tweeter. Above, less case. 4⅝x4". Shpg. wt., 2½ lbs. 27.00

20 A 8053. N-1 Adjustable High-Pass Filter. (Not illus.) 4-16 ohms. 2500, 5000, 10,000 Hz xover. 3⅝x3¼x3". 2 lbs. 15.00

AP-8 Level Control. (Not illus.) For 8-16 ohm systems.
20 A 8055. Shpg. wt., 7 oz....................7.50

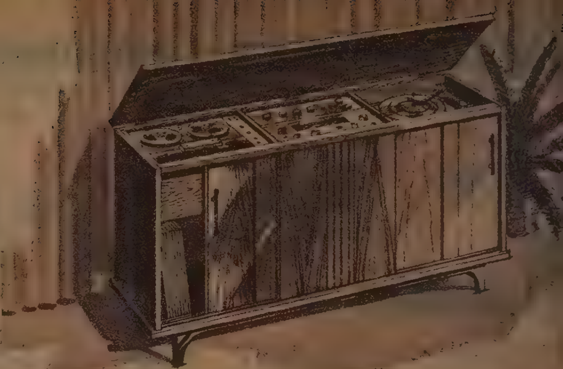
Y **20 A 8049. T-30 Midrange/HF Driver.** For H-600 or Cobreflex horns. 350 Hz to beyond audibility. 50 watts. 8 ohms. 1¾"-18 throat. 3½x3¾". Shpg. wt., 2¾ lbs.........33.40

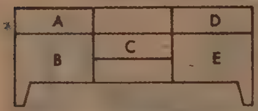
Z **20 A 8050. H-600 Midrange/HF Horn.** Midrange down to 600 Hz. 7¾x8¾x4¾". Shpg. wt., 2 lbs. 23.80

AA **12 A 7566 X. Cobreflex Twin-Flare Horn.** Midrange down to 200 Hz. 1⅜"-18 throat. 10¼x18½x9¼". Use with T-30 above. Shpg. wt., 10¼ lbs....................29.39

BB **20 A 8048. C-8M 8" Midrange Speaker.** 500-5000 Hz. 50 watts. Impedance: 8 ohms. Shpg. wt., 3½ lbs....18.20

Distinctively styled Allied® hi-fi Furniture complements any decor



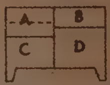


All sections are 17⅞" wide. A and D: 9" high (6" above board, 3" below), 14¾" deep. B and E: 12¾" high, 15¼" deep. C is 21¾" high, 14¾" deep.

Smart Allied Ensemble—kit or assembled

Three-Piece Ensemble Kit

154.85



All 17⅞" w. A, C: 21¾" h, 16½" d, with adj. shelves. B: 9" h. (6" above board, 3" below), 14⅞"d. D: 12¾" h, 16¼" d.

Two-Section Equipment Cabinet Kit

79.95

Allied 3-piece ensemble or 1510 two-section equipment cabinet and 1511 speaker enclosures separately. Kits assemble with screwdriver, come with oil for walnut finish. ¾" construction. Cabinet, 27¼x38½x17¼". Enclosure, 27¼x18¼x17¼". Precut for 15", with 12" speaker adapter. Assembled, oiled walnut finish.

Item	Wt., Lbs.	Kit Ready-to-Finish		Assembled, Finished	
		Stock No.	EACH	Stock No.	EACH
Ensemble	209	20 A 9363 L3ZF	154.85	20 A 9364 L3ZF	204.85
Cabinet	98	20 A 9356 ZF	79.95	20 A 9360 ZF	109.95
Enclosure	55	20 A 9357 ZF	39.95	20 A 9361 ZF	49.95

20 A 9461 XF. Custom Mount Panel. Wt., 4 lbs. 2.95

Allied 3-piece, top-loading Ensemble in kit or assembled form

3-piece Ensemble Kit **199.95**

3-section Equipment Cabinet Kit **119.95**

Handsomely-styled ensemble enhances your room deco while the special design provides excellent acoustics fo your hi-fi speakers. Features top-loading design for eas access to separate recorder and turntable compartments Record compartment has convenient sliding doors. Removable motor boards. Bass-reflex speaker enclosures Sculptured styled base. Baffles precut for 15" speakers adapters for 12" speakers also included. Storage spac for 200 LP's, with sturdy record support wires.

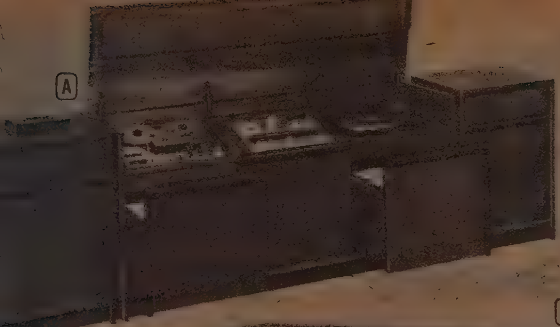
Allied 1523 equipment cabinet, 28⅜x57⅝x18¼". Allie 1524 speaker enclosures, each 28⅜x18¾x18¼". All yo need is a screwdriver to assemble kits. Predrilled holes sanded, ready-to-finish with quick-drying walnut finishin oil, included. Complete with custom mounting panels Smart-looking brown grille cloth. Instructions. Assemble cabinets finished in beautiful oiled walnut. See shippin information below.

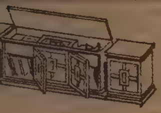
Item	Wt., Lbs.	Kit, Ready-to-Finish		Assembled, Finished	
		Stock No.	EACH	Stock No.	EAC
Ensemble	264	20 A 9322 L3ZF	199.95	20 A 9324 L3ZF	279.9
Cabinet	144	20 A 9316 ZF	119.95	20 A 9319 ZF	179.9
Enclosure	60	20 A 9318 ZF	44.95	20 A 9321 ZF	54.9

SHIPPING INFORMATION

Furniture is shipped by truck or express from Steven Point, Wisconsin (shipping charges collected by carrie on delivery). Allow 30 days for kits, 45 days for assemble units. Sorry, no C.O.D. orders.

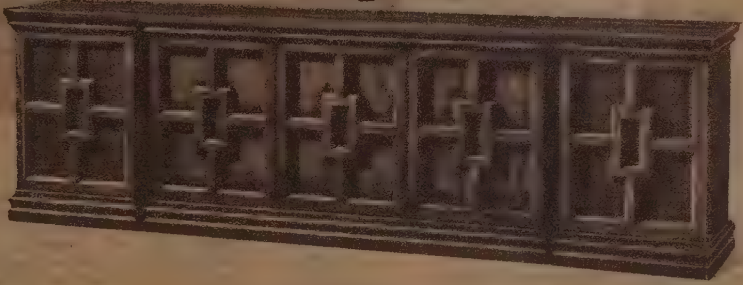
Buy with no money down . . . see page 43





BARZILAY
Exquisitely styled furniture for your hi-fi components

Choose from factory assembled models or money-saving kits



"Design X" 3-piece contemporary ensemble

74^{95} Kit form

Uniquely slanted panels . . record drawers on ball-bearing slides

ched grain, premium-grade walnut. Full-width lift top. nger section, 18¾" w., 15" deep. Receiver and tape ions each, 18¾" w., 15¾" deep. Record drawers each, x16½x14½". Overall cabinet, 29½x58½x19". Enures for 12" or 15" speakers with tunable ducted ports. h, 29½x19½x19", Kits in ready-to-finish form with hing kit supplied. See shpg. Note below.

9220 L2ZF. Ensemble Kit. 280 lbs.	274.95
9221 L2ZF. 11E. Assembled Ensemble. 280 lbs.	424.95
9222 ZF. K101. Eqpt. Cab. Kit. 160 lbs.	164.95
9223 ZF. 111. Assembled Eqpt. Cab. 160 lbs.	259.95
9224 ZF, K102. Spkr. Encl. Kits. 120 lbs.	Pair 114.95

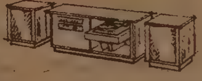
B "Design Eight" 3-pc. Mediterranean Ensemble

299^{95} Kit form

Gorgeous Classic Mediterranean style in oak solids and veneers

Full top-loading cabinet in matched grain pecan veneer. Changer section, 17¼" w., 15" deep. Receiver section, 18¼" w., 15" dp. Tape section, 18¾ w., 15" dp. Overall cabinet, 29x59¼x18¾". Enclosures for 12" or 15" speakers. Each, 29x21¼x18¾". Kits with finishing kit supplied for six different tones. Assembled, oiled pecan veneer finish. See Shpg. Note below.

20 A 9215 L2ZF. Ensemble kit. 270 lbs.	299.95
20 A 9218 L2ZF. 87E Assembled Ensemble. 270 lbs.	559.95
20 A 9216 ZF, K81 Eqpt. Cab. Kit. 140 lbs.	184.95
20 A 9219 ZF, 871 Eqpt. Cab. Assembled. 145 lbs.	349.95
20 A 9217 ZF. K82 Spkr. Encl. kits. 125 lbs.	Pair 129.95

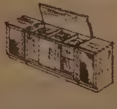


259^{95}

Barzilay "Design Five" 3-piece ensemble

kit-form with finishing kit supplied; or assembled with nut veneer and solids. Cabinet 48" w. Record player wer, 20" w., 15" dp. Receiver section, 20" w., 24½" h. closures for up to 15" speakers with tunable ducted t, deluxe grille, are 29x24x18". Tambour door cabinet, 48x18". See Shpg. Note below.

A 9005 L2ZF. Ensemble Kit. 265 lbs.	259.95
A 9006 L2ZF. 700E Assembled Ensemble. 265 lbs.	389.95
A 9007 ZF. K71 Eqpt. Cabinet Kit. 110 lbs.	159.95
A 9010 ZF. 761 Eqpt. Cabinet, Assembled. 135 lbs.	219.50
A 9008 ZF. K72 Spkr. Encl. Kits. 160 lbs.	Pair 114.95



Kit Form **294^{95}**

Barzilay "Design One"/b deluxe Ensemble

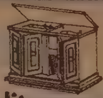
Full-width lift top. Top center, 18¼" w., 15½" dp. Top left and right, 18¾" w., 15½" d. Lower left and right 18¾" w., 13" h., center, 18¼" w., 23" h. Overall cabinet, 28¾x58½x18½". Enclosures for 12" or 15" speakers with tunable ducted ports. Each, 28¾x22x18½". Kits with finishing kit. Assembled, oiled black walnut. See shpg. Note below.

20 A 9151 L2ZF. 3-pc. Ensemble Kit. 280 lbs.	294.95
20 A 9152 L2ZF. 3-pc. 100E/b Assembled Ensemble	459.95
20 A 9153 ZF. K61/b Eqpt. Cabinet Kit. 160 lbs.	174.95
20 A 9155 ZF. 161/b Assembled Eqpt. Cabinet	279.95
20 A 9154 ZF. K62/b Spkr. Encl. Kits. 120 lbs.	Pair 124.95

HIPPING NOTE: All furniture sent truck or express from factory in California. Allow at least 45 days for delivery. Sorry, no C.O.D.

Rockford

389^{95}



Easy component access

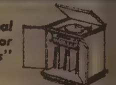
Tawny Oak 3-piece Mediterranean Ensemble

- Fully assembled and styled in genuine oak
- Space for components plus 150 record albums

Elegantly styled 3-piece Mediterranean ensemble in beautifully finished genuine oak. Features double-hinged doors with smart decorator-styled pulls. Full length lift top. Panel behind left door permits custom mounting of components; may be cut to double record storage space. Upper left, 19x16¼", adjustable height. Upper right inside (changer), 6½x18x16¼". Storage space below. Hi-fi cabinet overall, 30½x42x19". Each speaker enclosure, 30½x20½x19½" . . accommodates 15" speaker, 12" with adapter incl. *Sent from Rockford, Ill. Shipping Note Below.* 239 lbs.

20 A 9229 L3ZF. 3-Pc. Ensemble........................389.95
20 A 9230 ZF. 922 Cabinet Alone. 125 lbs..............237.50
20 A 9231 ZF. 982 Speaker Enclosure. 57 lbs............97.50

224^{95}



Ideal for "compacts"

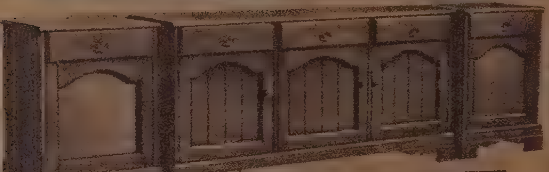
Walnut-finished Contemporary Ensemble

- Clean lines and handsome styling for any decor
- For separate components or "stereo compacts"

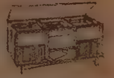
Completely assembled with oiled walnut finish. Cabine
is perfect for "compacts" or standard components. Overal
29¼x21x21⅛". Full lift top. Upper compartment, 19⅛
18"; height adjusts to 9¼". Lower compartment 15x19⅛
18" behind hinged doors; use for front panel componen
mounting. For custom front mounting of component
order panel below. Each speaker enclosure 29¼x21x21⅛
Takes up to 15" speaker. Takes 12" with adapter incl. *Se*
from Rockford, Ill. Ensemble shpg. wt., 198 lbs.

20 A 9225 L3ZF. 3-Pc. Ensemble..........................224.9
20 A 9226 ZF. 211 Cabinet. Shpg. wt., 70 lbs..............89.5
20 A 9227 ZF. 281 Speaker Enclosure. Wt., 64 lbs.........77.5
20 A 9228 XF. Custom Panel. Shpg. wt., 4 lbs................5.0

Gamber-Johnson



384^{85}



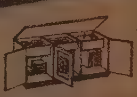
Lift top

Early American 3-section Ensemble

Genuine maple veneers and solids in Colonial styling; harvest maple finish. Full length lift top. Cabinet size overall. 27½x59x18⅝". Center, 14x18¾x14¾". Sides, 9x17⅝x14¾". Record storage for 200 LP's below. Each speaker enclosure, for 12" or 15" speakers, 27½x20⅝x18⅝". *From Stevens Point, Wis.*

20 A 9060 L2ZF. 3-Pc. Ensemble. 3-Section Cabinet. Shpg. wt., 238 lbs..........384.85
20 A 9062 ZF. Model 924. 3-Section Equipment Cabinet Alone. Shpg. wt., 142 lbs..........219.95
20 A 9073 ZF. Model 921. 2-Section Equipment Cabinet similar to above. Shpg. wt., 105 lbs..........164.95
20 A 9063 ZF. 922. Speaker Enclosure. 48 lbs. **Ea. 84.95**

434^{85}

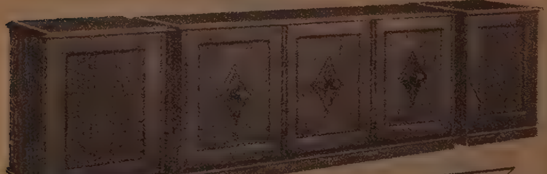


Holds 200 LPs

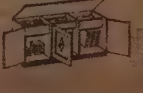
Deluxe Mediterranean 3-section Ensemble

Spanish oak veneers, solids. Gamber-Johnson's finest ensemble! Cabinet size overall, 27x59x18⅝". Upper left and right, 9x17⅝x14¾" with adj. panels. Center, 14x18¾x14¾". Storage below each section. Enclosures, for 12" or 15" speakers, 27x21⅛x18⅝". *Sent from Stevens Point, Wis.*

20 A 9202 L3ZF. 3-Pc. Ensemble. 240 lbs..........434.85
20 A 9203 ZF. Model 964. 3-Section Equipment Cabinet Alone. Shpg. wt., 148 lbs..........259.95
20 A 9204 ZF. Model 961. 2-Section Equipment Cabinet similar to above. Shpg. wt., 105 lbs..........179.95
20 A 9205 ZF. 962 Speaker Encl. 46 lbs.....**Ea. 89.95**



349^{85}



Holds 200 LPs

Popular Mediterranean 3-section Ensemble

Spanish oak veneers, solids . . low price for this quality. Cabinet size overall, 25¼x58¼x18½". Upper left and right, 9x17⅞x14½" with adj. panels. Center, 19¾x17⅞x14½". Storage below each section. Enclosures, take 12" or 15" speakers, 25¼x21x18½". *Sent from Stevens Point, Wis.*

20 A 9206 L3ZF. 3-Pc. Ensemble. 220 lbs..........349.85
20 A 9207 ZF. Model 994. 3-Section Equipment Cabinet alone. Shpg. wt., 138 lbs..........214.95
20 A 9208 ZF. Model 991. 2-Section Equipment Cabinet similar to above. Shpg. wt., 98 lbs..........149.95
20 A 9209 ZF. 992 Speaker Encl. 41 lbs.....**Ea. 69.95**

SHIPPING NOTE: All furniture sent truck or express from factory. Allow at least 45 days for delivery. Sorry, No C.O.

mart Record Cabinets at low Allied prices

11^{95}

ontemporary Record Cabinet

dsomely-styled cabinet adds a smart
h to the decor of modern homes.
rdy construction features stain and
resistant walnut-like finish. Offers
erous storage space for records. Stor-
section has sliding doors, holds up to
LP's. Matching brass door pulls.
rall size, 25x30x16". Assembles in a
minutes. Shpg. wt., 12 lbs.
9024 X......................11.95

Provides ample storage space for components, records, books

27^{95}

$5 monthly*

less components

Combination Record and Equipment Cabinet

Combines function and beauty. Finely-crafted contemporary design cabinet houses hi-fi components, long-playing records, and books. Rich, lustrous walnut-like finish on hardboard. Component shelf section, 9x15" deep, offers easy front access. Smoothly sliding doors below conceal storage space for 300 record albums, *plus* your favorite books. Record storage section, with dividers, 15x15" deep. Provides compact storage space for use in small apartments, recreation rooms. Overall, 36x30x15". Assembles easily.
20 A 7043 X. Shpg. wt., 33 lbs...27.95

19^{95} $5 monthly*

temporary Record Cabinet. Hand-
nely styled. Four smooth-sliding
rs conceal storage space. Holds up
225 LP's. 3 brass-plated record di-
ers. Stain, scar-resistant walnut-
finish. 25x40x17½". Assembles in
utes. Shpg. wt., 24 lbs.
A 9023 U....................19.95

29^{95} $5 monthly*

Handy Record Cabinet/Room Divider. Flush-with-floor 1-tier cabinet stores 225 LP's. 35½x14x31" h. Beautifully styled with walnut grain finish. Use several together. ‡48"h. †20"h.
20 A 9040 U. 43 lbs..............29.95
20 A 9042 Z. With 2 Tiers. ‡58 lbs. 34.95
20 A 9041 X. Without Tier.† 30 lbs. 24.95

44^{95} $5 monthly*

Deluxe Contemporary Record Cabinet. Striking contemporary design will blend with almost any modern decor. Solid veneer construction with walnut-like finish. Tough, mar-proof top is virtually indestructible. Stores 175 LP's. 25x27x18". Shpg. wt., 55 lbs.
20 A 9043 Z....................44.95

Mediterranean Record Cabinets

Ⓐ 54^{95} $5 monthly*

Ⓐ Solid-Oak Veneer Cabinet

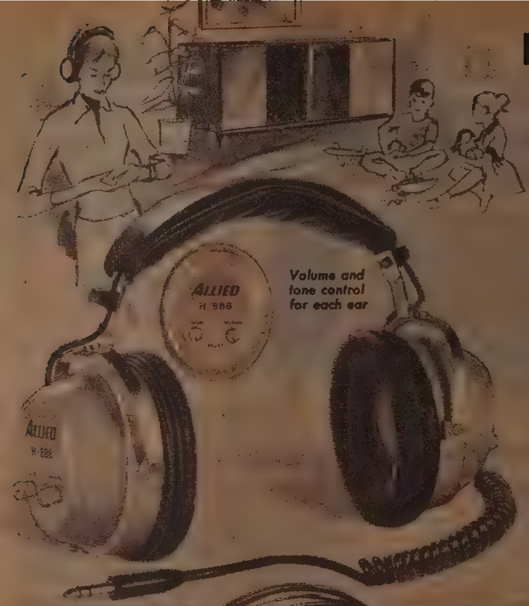
Elegant Mediterranean styling in a record cabinet that is truly functional. Carefully constructed of solid-oak veneer and superbly finished in rich pecan. Easily maintains a high lustre. Holds up to 200 LP's. Boasts two strikingly detailed doors, period-matched hardware. 25x28x16".
20 A 9044 Z. Shpg. wt., 50 lbs.........54.95

Ⓑ Hexagonal Record Cabinet

Dramatically styled in hexagonal shape. Finished with selected pecan-oak veneers. Two swing-open doors with magnetic latches. Extra-large storage space holds up to 200 long-playing records. Hand-woven lattice veneer on doors; antique finish hardware. Record rack is removable. Size, 21x28x24".
20 A 9021 Z. Shpg. wt., 52 lbs.........64.95

64^{95} $5 monthly* Ⓑ

See page 438 for complete Credit information


ALLIED
H 886
Volume and tone control for each ear

Finest Allied® Headphones ever

. . hear music "come alive"

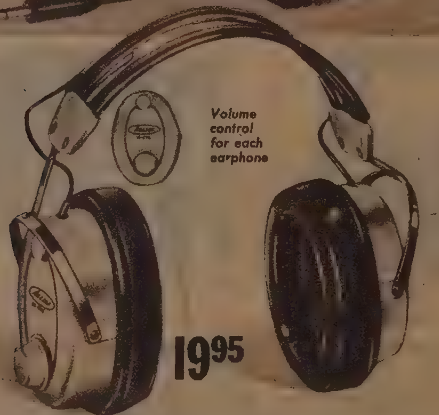
39⁹⁵

Woofer and tweeter in each earphone assure superior full-range stereo hi-fi

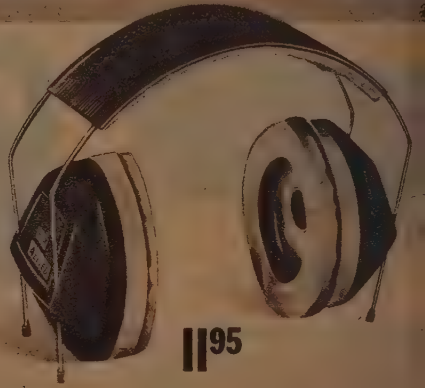
Model H886. Enjoy live-concert realism at home with no outside distractions. These superb stereo headphones are engineered to tailor music to your individual pleasure. Separate bass and treble in each earphone—2¾" dynamic woofer, 1⅝" dynamic tweeter—deliver the rich lows and crisp highs needed for full stereo enjoyment.

Separate volume and tone controls on each earphone assure the maximum in listening pleasure without bothersome trips back and forth to your receiver. Each control is easily identifiable by touch when wearing headset. Cushioned, stainless steel headband and soft, highly compliant earseals give you a comfortable airtight fit that permits hours of personal audio satisfaction.

Lifelike response across the full audio range from 20 Hz to beyond audio range. Impedance 8-16 ohms to match any stereo amplifier. Gray. With 5-foot coiled cord that extends to 16 feet and standard ¼" phone plug. Japan.
20 A 9710. Shpg. wt., 1¾ lbs. 39.95


Volume control for each earphone

19⁹⁵



11⁹⁵

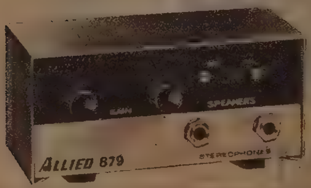
Wide-range response at a thrifty price . . our best selling Allied Stereo Headphones

Model H876. Get full stereo realism at a value price. Volume /balance control for each ear assures full stereo sound no matter where you sit. Has dynamic driver elements to surround you with full-range stereo. Soft polyfoam ear cushions lock out room noise and let you listen with full comfort. Stainless steel headband adjusts to fit anyone. Cushions and headband are removable and of easy to clean vinyl. Frequency response, 16-16,000 Hz. 3-16 ohm impedance matches any stereo amplifier. Brown and tan. With 8-foot cord, standard ¼" plug.
20 A 9508. Shpg. wt., 1¼ lbs. .19.95

Lowest priced Allied Stereo Headphones . . excellent fidelity at a budget price

Model H878. Only Allied could bring you these fine stere headphones at such a low price. They literally surroun you with wide-range stereophonic sound. Comfortabl vinyl earcups seal out unwanted room noises; easily re moved for cleaning. Vinyl-covered foam rubber headban lets you listen without feeling of fatigue. Large 3½" trans ducers for each ear. Frequency response, 30-15,000 Hz Impedance 3-16 ohms to match any stereo amplifier o receiver. Charcoal gray. With 8-ft. cord and standard ¼ phone plug.
20 A 9579. Shpg. wt., 1¼ lbs. 11.9

Allied Model H879 Remote-Control for stereo headphones

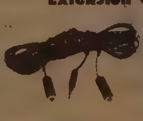


9⁹⁵

Can be used with or without speakers

Adjust volume of 2 headphones from your chair. 2 volume controls. ¼" jacks. 2¾x4x2". Cable below.
20 A 9577. Wt., 1 lb. 9.95
55 A 9855. 5-Conductor Cable. Shpg. wt., ¾ lb. . .25-foot Roll 2.10

Extension Cord/2-headphone Adapte



7⁹⁵

Allied H881. An easy an thrifty way to use tw headphones with a stere receiver or amplifier. N rewiring, plugs into stand ard headphone jack. Tw ¼" jacks for phones, 20-ft cord. Shpg. wt., 1½ lbs.
20 A 9581. . . . . .7.9

Allied stereo headphones offer greatest performance for your dolla

Koss hi-fi Stereo Headphones

er response than
before possible

95^{00}

] Wide-range electrostatic Stereo Headphones

el ESP-6. Delivers a never-be- possible depth and breadth of ıd for truly superb stereo lis- ıg. Electrostatic driver ele- ts provide response far beyond ːs of ordinary voice coils and -type driver elements. Self- gized diaphragms for fine 10- 00 Hz response. No special am- er or power supply needed.

l indicator in each earpiece s up to indicate excessive d pressure. Foam rubber head- l plus fluid-filled earcushions otal comfort. 4-16 ohms. With , 10′ cord, junction box, speak- -off switch for easy hook-up. vidual machine-run response e with each set.
8033. Shpg. wt., 5 lbs...95.00

B The most popular Koss Stereo Headphones

Model Pro-4A. One of the most popular stereo headphones ever produced. These deluxe stereo headphones provide full-fidelity private listening—allow you to hear the best in stereo music without outside interruptions.

Soft fluid-filled earcushions and adjustable padded headband permit you to listen for hours with no resulting fatigue. Heavy-duty shatterproof construction will take all the wear and tear you can give it. Frequency response, 20-20,000 Hz. Impedance, 4-16 ohms. With 10-foot coiled cord and standard ¼" plug. Wt., 2 lbs.
20 A 8356....................49.00
20 A 8044. Pro-600A. As above, but 600 ohms. Shpg. wt., 2 lbs. 53.90

49^{00}

Fluid-filled earcushions allow hours of listening pleasure with no fatigue

19^{95}

Low-cost "Stereophones"

lel SP-3XC. 3½" dynamic element ach earpiece. Foam-cushioned ear- s. Rugged plastic headband. Fre- ıcy response, 20-16,000 Hz. Im- ance, 4-16 ohms. 10-ft. cord, plug.
8357. Shpg. wt., 2 lbs........19.95
lel SP-5SM. Similar to above, but lavalier-type stereo/mono switch. quency response, 20-15,000 Hz. edance, 4-8 ohms.
8030. Shpg. wt., 2½ lbs....19.95

34^{25}

High-quality "Stereophones"

Model KO-727. Make stereo listening a personal experience. These fine stereo headphones accept up to 60 watts per channel from any normal program source. For any system with 4, 8 or 16 ohms output. Adjustable headband, foam-filled earcushions. Cushions remove for easy cleaning. Response, 40-15,000 Hz. Distortion less than 1%. With 10-ft. cord, plug.
20 A 8019. Shpg. wt., 2 lbs........34.25

26^{00}

Lightweight "Stereophones"

Model K-6. Provide breathtaking full-dimensional sound. Accept up to 60 watts per channel from any normal music program source. Padded headband, vinyl-covered foam-filled earcushions. Lightweight (only 15 oz.)—listen for hours in complete comfort. Earcushions are removable for easy cleaning. Response, 10-15,000 Hz. 4-16 ohms. With 10-ft. cord, plug.
20 A 8358. Shpg. wt., 2 lbs......26.00

Remote-Controls for stereo headphones and Hookup Box

-10 Control Box. Control stereo head- hones from your chair. Accepts two s of phones; volume control for phone, speaker cutoff switch. Wal- case, 6¼x4⅝x2⅝". 4-16 ohms.
8045. Shpg. wt., 2 lbs........24.95

20 A 8031. T-5 Control Box. (Not illus.) Vol. control, speaker cutoff switch. 2 stereo phone jacks. 4-16 ohms. 5⅞x3⅛x2⅞". 1 lb...............9.95
20 A 8032. T-1 Hookup Box. (Not illus.) Match SP-3XC, SP-5SM above to 600-10,000 ohms. 6¼x3¾x2". Shpg. wt., 8 oz...................7.95

Stereo Headphones . . a great way to hear hi-

SUPEREX

49^{95}

$5 monthly*
See page 438

Separate woofers, tweeters

World-famous Superex ST-PRO-B

One of the finest stereo headphone sets you can own. Reproduces the full audio range with a clarity and brilliance usually restricted to the symphonic concert auditorium. Engineering design features a separate dynamic woofer and ceramic tweeter coaxially mounted in each earpiece. Produces a compact, comfort-weight headset that surrounds the listener with a "you are there" performance.

Vinyl-covered foam earcushions block out external noise. Padded, spring steel headband is adjustable. Full-range response of 18-22,000 Hz. Full L-C crossover network. Impedance, 4-16 ohms. With 7-ft. cord and ¼" plug.
20 A 8359. Shpg. wt., 2 lbs. 49.95

20 A 8366. Model ST-PRO. Similar to above, but simpler highpass crossover network. Somewhat narrower response of 20-20,000 Hz. Wt., 2 lbs. 39.95

SUPEREX 59^{95} **TELEX** 59^{95}

A **Superex Model PRO-B-V.** New concept in stereo hea design. Each earpiece has specially calibrated matched 2-way woofer/tweeter system with crossover work. Individually tuned and ported to reproduce so comparable to the finest musical systems. Cover full quency range without coloration or distortion. Unique cushion design follows head contours to form perfect . . soft vinyl-covered urethane foam assures comfort Adjustable headband. Amazing response of 16 to 25,000 4-16 ohms impedance. With 10-ft. coiled cord.
20 A 8409. Shpg. wt., 3 lbs. 5

B **Telex "Serenata-1."** Fine stereo headphones. Buil tone control. Liquid-filled earcushions have ear pressure adjustment to seal out noise. 20-20,000 response. 4-16 ohms. 8-ft. detachable coiled cord and plug. Scuff-resistant vinyl carrying case.
20 A 8353. Shpg. wt., 2½ lbs. 5

20 A 8377. "Serenata-2." As above, but no tone contro carrying case. With 8-ft. attached cord. Wt., 2½ lbs. 4

Dustproof headphone Carry/Storage Case

5^{95}

Model CAD-1. Rugged naugah has the look of fine, natural-g leather. Case has full-length per, tote tab. 9x7x3½".
20 A 8419. Wt., 2 lbs. . . . .

Popular Stereo Headphones for every budget

SUPEREX 39^{95} **SUPEREX** 29^{35} **SONY** 22^{50} **TELEX** 19^{95} **TELEX** 9^{9}

C **Superex Model ST-MB-IV.** Reproduces musical range and depth brilliantly and flawlessly. Each earcup has tweeter level control, "tuned port" design. Each features 3½" dynamic woofer and coaxially-mounted dynamic tweeter. Perfect-seal earcushions of vinyl-covered urethane foam. Comfort-fit adjustable headband. Response: 18-21,000 Hz. Impedance: 4-16 ohms. 10-ft. cord, standard ¼" plug.
20 A 8408. Shpg. wt., 2 lbs. 39.95

D **Superex ST-M.** Each earpiece has separate woofer, tweeter and crossover network. Both channels have level control for perfect stereo balance. Adjustable headband for precise fit, comfortable vinyl-covered foam earcushions. Frequency response, 20 to 20,000 Hz. Impedance, 4-16 ohms. With 7-ft. cord and ¼" plug.
20 A 8420. Wt., 2 lbs. 29.35
20 A 8423. Model STM-2H. Above, but 200-15,000 ohms. Wt., 2 lbs. 35.00

E **Sony DR-6A.** Dynamic stereo he phones provide full-range frequ cy response for private stereo listen or tape monitoring. Built-in tra ducer has dome-shaped configurat for flatter response throughout entire audio spectrum. Full-range quency response. Comfort-fit earcu ions, adjustable headband. Imp ance, 8 ohms. With 7-ft. cord standard ¼" plug. Japan.
20 A 8412. Shpg. wt., 2 lbs. 2

F **Telex "Combo."** Fine quality at a modest price . . outstanding hi-fi value. Big 3½" speaker in each earcup for rich bass. Earcup gliders adjust to listener's head for maximum comfort. Vinyl earcushions provide excellent seal. Foam padded headband. Response, 10-15,000 Hz. Impedance, 4-16 ohms. With 8-ft. cord, standard ¼" plug.
20 A 8426. Shpg. wt., 1 lb. 19.95

G **Telex "Encore."** Fine quality and great versatility a low price. Features completely adjustable headb that also can be worn under chin for extra convenience comfort—avoids ruffled hair. Good frequency respons 30 to 15,000 Hz. Impedance, 8 ohms. With 8-ft. cord standard ¼" plug. Shpg. wt., 1 lb.
20 A 8367 9

Classic, Folk, Electric Guitars and Outfits

2-pickup Tremolo
uitar, Amp Outfit

ve
.00 **109.90**

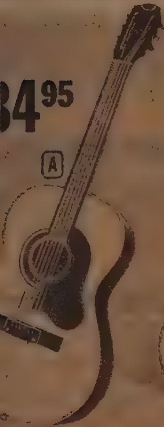
ately, $139.90. Hollow-body guitar has 3-way se-
switch, volume, tone controls. Reinforced maple
8-way adjustable bridge, rosewood fingerboard.
14¾x3". 20-watt peak music power amp has
lo speed, depth controls. 17x16x6". Access. illus.
0100 L2U. Japan. Shpg. wt., 22 lbs..........109.90
5133 U. Guitar, Case, Access. 10 lbs..........79.95
5074 U. Amplifier Alone. Wt., 12 lbs..........59.95

3-pickup Tremolo Guitar, Amp Outfit

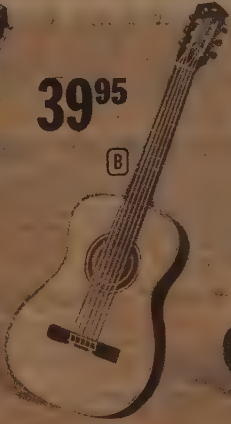
Save $20.00 **89.90**

Separately $109.90. Bargain-priced outfit. Twin-horn solid-body guitar has recessed tremolo, three-way selector switch. 40x13x1½". 10-watt peak music power amplifier has 3 inputs, 8" speaker, volume and tone controls. 15¼x12¾x5¾". Accessories illustrated. Japan.
10 A 0147 L2U. Shpg. wt., 22 lbs..................89.90
10 A 5075 U. Guitar, Case, Access. 10 lbs..........69.95
10 A 5076 U. Amplifier Alone. 12 lbs..............39.95

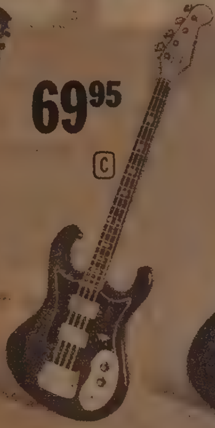
4.95



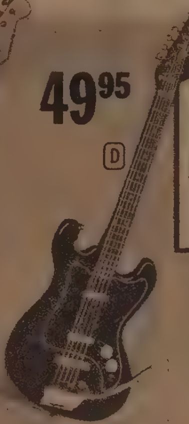
39.95



69.95



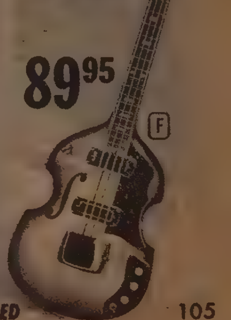
49.95



All Guitars include Case, Book and Pick

99.95

89.95



ustom-Crafted Folk Guitar. Has the deep
hellow tone just right for folk singing.
cted spruce top, grained mahogany back
sides in natural finish. Heavy celluloid
ing. Fan bracketed reinforcement, rose-
d fingerboard. 39x14½x3¾". Japan.
5134 U. Shpg. wt., 6 lbs..........34.95

Concert-Size Classic Guitar. Expertly con-
tructed 18-fret instrument has selected
ce top, special hardwood body with sun-
t effect on back. Finest quality nylon
gs, steel reinforced neck, rosewood fin-
oard. 39x14½x3¾". Japan.
5135 U. Shpg. wt., 7 lbs..........39.95

olid-Body 2-Pickup Bass Guitar. Brilliant
natural tone, rich, vibrant bass. Separate
me and tone controls. Adjustable maple
, bridge. Rosewood fingerboard, tortoise-
l plastic guard. Red sunburst. 40½x14x
". Japan.
5136 U. Shpg. wt., 10 lbs..........69.95

D **Our Lowest Priced Solid-Body 2-Pickup Guitar.** Perfect for the aspring guitarist in your family. Fast action, easy to play. Has torsion-bar tremolo, slim, fast-action steel reinforced neck, adjustable bridge. 37½x12x1". From Japan.
10 A 5137 U. Shpg. wt., 12 lbs..........49.95

E **2-Pickup Hollow-body Acoustic Guitar with Tremolo.** Our finest. Has exceptionally rich and mellow tone. Spruce top, flame maple back and sides. Fast action, adjustable laminated maple neck, pearl markers. 41x13x1¾". Japan.
10 A 5138 U. Shpg. wt., 9 lbs..........99.95

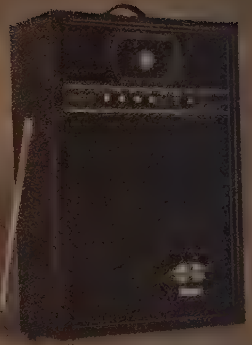
F **Violin-Shaped 2-Pickup Full-Size Semi-Acoustic Bass Guitar.** Excellent performer. Crafted of quality woods: arched spruce top, maple body, ebony fingerboard. Adjustable bridge, two adjustable pickups. Volume, tone controls. 41x11x2". Japan.
10 A 5139 U. Shpg. wt., 16 lbs..........89.95

IPPING NOTE: Items with suffix U, W or Z in stock no. sent truck or express. See Ordering Information pages.

Our finest selection ever of Musical Instrument Amplifiers

C 315^{00}

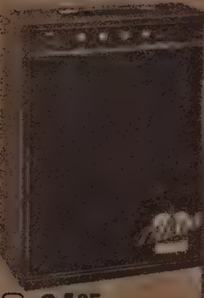
A 169^{95}



B 149^{95}

D 199^{95}

E 89^{95}



F 64^{95}

G 249^{95}

A Solid-state 50-watt* Amp with tremolo and reve

Piggyback amplifier with tilt-back legs. Tremolo and reve pulsating tremolo speed indicator light. Inputs: two instrume one mike. Separate bass, treble controls. Two 10″ speakers, horn in 28x22x9″ enclosure. Amp, 22x9½x6″. 117 VAC. Japan

10 A 5141 ZF. †Shpg. wt., 55 lbs. 169

B Full-feature solid-state 40-watt* Speaker-Amp

Tilt-back amplifier has 3 inputs, VU meter, reverb and trem with separate foot switch jacks. Tremolo speed and intens controls, pulsating speed indicator light. Two 10″ heavy-du speakers, HF horn. 28½x20x8¼″. 117 VAC. Japan.

10 A 5142 UF. †Shpg. wt., 31 lbs. 149

C Dual-channel 100-watt* piggyback Amplifier

High-performance dual-channel tilt-back amplifier with 4 inpu Volume, bass, treble for each channel. Reverb, tremolo with f switch jacks. "E" oscillator; earphone monitor. Two heavy-du giant 15″ speakers. Scuff-resistant covering. Amp, 25x10x speaker, 35x22x12″. 117 VAC. Japan.

10 A 5143 ZF. †Shpg. wt., 95 lbs. 315

D Padded 90-watt* solid-state piggyback Amplif

Dual channel, 4 inputs. Reverb, tremolo speed and depth on channel. Two 12″ speakers in padded vinyl cabinet on whe Amp, 6x17½x6½″; speaker, 29½x17½x11″. 117 VAC. Japan.

10 A 5103 ZF. †Shpg. wt., 70 lbs. 199

10 A 5144 ZF. 75-Watt* Amplifier. Similar to above, but 75 wat and not padded. From Japan. †Shpg. wt., 70 lbs. 179

E Solid-state 30-watt* Amp has reverb, tremol

Piggyback amplifier delivers full sound from two 8″ speake 3-inputs. Volume, bass, treble, tremolo depth, speed contr Amp. 4x15x5¾″; speaker, 26x15x8″. 117 VAC. Japan.

10 A 5145 UF. †Shpg. wt., 30 lbs. 89

10 A 5147 UF. 20-Watt* Amplifier. Solid-state. 3 inputs. Am 17x7½x5″; spkr, 23¾x17x7½″. 117 VAC. Japan. †30 lbs. . .79

F Value-priced 17-watt* Amp with reverb, trem

Compact, solid-state amplifier features reverb and tremolo w foot switch jacks. 3 instrument inputs. Volume and tone contr Heavy-duty 10″ speaker. 20x16x8″. 117 VAC. Japan.

10 A 5148 U. †Shpg. wt., 17 lbs. 64

G 100-watt* tremolo-reverb Amp with 15″ speake

Sensational 100-watt* piggyback boasts two giant 15″ speake sound duct. Solid-state preamp, 4 inputs. Dual channel, e with volume, bass, treble; tremolo and reverb on channel 1. D foot switch jacks. Amp, 8x26½x10½″; tuned-port speaker enc sure, 36x10½x26½″. 117 VAC. Japan.

10 A 5146 ZF. †Shpg. wt., 60 lbs. 249

---

*Musical instrument amplifiers rated at peak music pow

per-power 15-inch Speaker

AH "big beat" Instrument Speaker

ull 125-watt peak power handling capacity
Aassive 15-pound magnet structure
elivers deep, rich bass frequency response

5R3R. There's no better buy in a 15" speaker.
dles the punishing power and low-end frequency
e of a bass guitar or string bass even through
-output amplifiers. Giant 15" cone delivers truly
essive sound—a must for the big bass beat of
y's rock sound, or for the rich, mellow tones of
e-string melody. 3" heat-proofed voice coil
ates in a massive 15-lb. magnet structure for a
endous 125-watt peak power capacity. Fre-
cy response, 30-5000 Hz. Impedance, 8 ohms.
nting diameter, 14⁹⁄₁₆"; depth, 8³⁄₁₆". Shpg. wt.,
os.
3522 U. **34.75**

SPECIAL SPEAKER VALUE

Was $69.50 in last year's catalog

34⁷⁵

Combo Instruments, Amplifiers and Accessories

0-watt* piggyback bass Amplifier

yback bass amplifier provides fine
d through two 12" speakers. Two
ts; volume, bass, treble controls;
eaker jacks; pilot light; fuse. 4
-purpose tubes, 2 diodes. Ampli-
4½x17½x9"; speaker, 24x17½x
17 VAC. From Japan.
4773 UF. †Shpg. wt., 38 lbs. **99.95**

B 12-voice Rhythm Box

l-state rhythm box provides 12
es to expand your combo sound:
ch, cha-cha, mambo, samba,
nba, tango, swing, fox trot, bosa
., slow rock, rock 'n roll, waltz.
volume control, soft-sharp control,
-quick control. Foot switch. Input,
ut jacks. 6½x20x6½". Japan.
5162UF. †Shpg. wt., 20 lbs. **179.95**

Solid-state Reverberation unit

an exciting reverb effect to your
ument amplifier. Has inputs for
ke and 1 instrument; foot switch
; amplifier jack. Reverb depth
tone control. On-off switch, pilot
. Rugged case, 3½x12x5". 117
'. From Japan.
5104 S. Shpg. wt., 6 lbs. . . **29.95**

All-metal solid-state Fuzz Box

er-shaped unit introduces a far-
'fuzzy" sound effect to any ampli-
Attack control varies effect.
me control; foot switch. 3 trans-
s. Input and output jacks. With
ecting cable and 9-volt battery.
dia. From Japan.
4580 S. Shpg. wt., 2 lbs. . . . **14.95**

E Wah-Wah Pedal

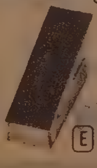
l-state wah-wah pedal creates
y unique sounds. Turns on auto-
cally with amplifier for a sensa-
l "turned-on" effect. Brings your
d up-to-date. Durable chrome
d base, rubber pedal. With 9-volt
ery and cord. Japan.
5164 X. Shpg. wt., 3 lbs. . . . **32.95**

A **99⁹⁵**

B

C

D



E

299⁹⁵ F

149⁹⁵ G

F Combo Organ with bass coupler

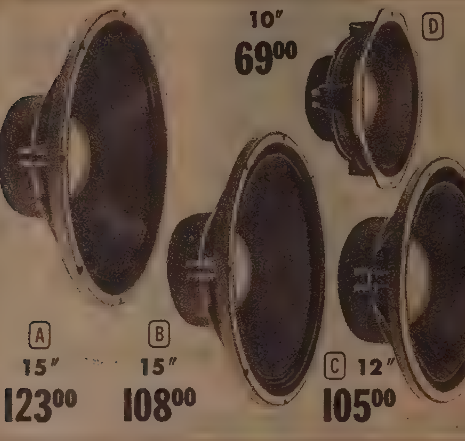
Liven up your combo with this portable electronic organ. 49-key 4-octave "C" scale. Coupler drops bass octave to "G". Flute, wood, brass, string and reed voices. Vibrato, vibrato speed, balance, volume controls; volume can be controlled with foot pedal or from keyboard. With removable legs, foot pedal, amplifier cord, carrying case, vinyl cover. 5½x31½x14" closed. Requires amp, see below. 117 VAC. Japan.
10 A 4634 ZF. †Shpg. wt., 55 lbs. . . . **299.95**

G Deluxe 75-watt* bass Amplifier

Perfect amp for organ above—great for bass guitars too. Boasts two 12" Jensen speakers, 3½" tweeter. 2 inputs. Bass, treble, volume controls. 4 tubes, 5 silicon rectifiers. 21½x26½x10½". 117 VAC.
10 A 4628 UF. †Shpg. wt., 48 lbs. . . **149.95**

IPPING NOTE: Combo Organ and amplifiers on these two pages sent truck or express from Chicago warehouse. See Ordering Information pages.

Musical Instrument Speakers to fit every nee



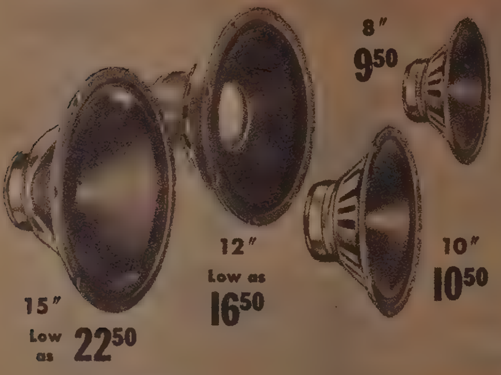
James B. Lansing Instrument Speakers

A Model D140F 15″ Bass Guitar Speaker. Produces stunni musical realism. Precision-made speaker is designed the professional bass guitarist or organist. Has 4″ vo coil and 11-lb. magnet structure. Solid construction. 8- ohms. Requires 13½″ dia. mounting hole.
16 A 3190 U. Shpg. wt., 23 lbs. 123

B Model D130F 15″ Instrumental Speaker. Provides dist tion-free sound through the musical spectrum. edge-wound voice coil: aluminum centerdome. 11- magnet structure. 8-16 ohms. Requires 13½″ mtg. h
16 A 3189 U. Shpg. wt., 23 lbs. 108

C Model D120F 12″ Instrumental Speaker. Perfect for guit and accordions. Rich bass and crisp treble. 4″ ed wound aluminum-ribbon voice coil. 11-lb. magnet str ture. 8-16 ohms. Requires 11″ diameter mtg. hole.
16 A 3188 U. Shpg. wt., 21 lbs. 105

D Model D110F 10″ Instrumental Speaker. You get gr sound even from a small enclosure with this reproduc 3″ voice coil is larger than those in ordinary speakers lb. magnet structure; 8-16 ohms. For 9″ mtg. hole.
16 A 3187 U. Shpg. wt., 15 lbs. 69



Utah Musical Instrument Speakers

Heavy-gauge reinforced steel chassis for strength rigidity. Steel pot plates use full potential of bariu ferrite magnet. Oversize voice coil absorbs heat of transi peaks. Rubberized cone edges smooth response, ext cone life. Internal dust seal. 8 ohms. *Use: EO, elec organ; G, guitar; BG, bass guitar; All, organ, any gui accordion. †Complete magnet structure. §Heavy-duty

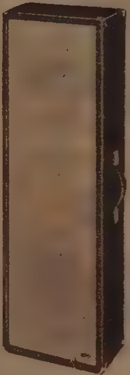
Stock No.	Mfr's Type	Size	Peak Watts	†Magnet, Lbs.	* Use	Wt., Lbs.	EA
16 A 3166	MS-8G	8″	30	1¾	EO, G	2¾	9
16 A 3167 X	MS-10G	10″	35	1¾	EO, G	3	1
16 A 3168 X	MS-12G	12″	60	4	All	6	16
16 A 3169 X	MS-12L	12″	75	6⅝	EO, BG	10¼	24
16 A 3170 X	MS-12B	12″	85	7¾	EO, BG	10¾	38
16 A 3171 X	MS-15G	15″	75	4	All	9	22
16 A 3172 X	MS-15L	15″	80	6⅝	EO, BG	12¼	29
16 A 3173 X	MS-15B	15″	90	7¾	EO, BG	12¾	43
16 A 3174 U	MS-1264B	12″	100§	15	BG	18½	63
16 A 3474 U	MS-1564B	15″	100§	15	BG	21	68

Utah High-power Musical Instrument Speakers

59^{95}

Model MI-15R2R 15″. Built to handle the punishing power and low-end frequency range of a bass guitar or string bass even through high-output amplifiers. 2″ heat-proofed voice coil operates in a massive 12½-lb. magnet structure for a full 100-watt peak power capacity. Enamel finish. 8 ohms. Mtg. dia. 14⁹⁄₁₆″; depth, 8⅛″.
16 A 3535 U. Wt., 17¾ lbs. 59.95

Model MI-12R2R 12″. Same specs as above, except compact 12″ diameter; power capacity, 80 watts peak. Mounting dia. 11⁹⁄₁₆″; depth, 6¾″.
16 A 3534 U. Wt., 15¼ lbs. 54.95



Musical Instrument Columns

E Utah MC-10-4. Four 10″ speakers. 100-watts peak. 8 ohms. Charcoal vinyl covered wood. Size 43⅜x13¼x7″.
16 A 3572 Z. Shpg. wt., 52 lbs. 59.95

Utah MC-10-4D. Above, plus four compression tweeters.
16 A 3573 Z. Shpg. wt., 56 lbs. 95.00

Utah MC-12-4. Four 12″ speakers. 150-watts peak. Other specs. same as MC-10-4. Size, 52⅝x15¼x8″.
16 A 3574 Z. Shpg. wt., 68 lbs. 79.95

Utah MC-12-4D. Above, plus 4 compression tweeters for extra crispness.
16 A 3575 Z. Shpg. wt., 72 lbs. 125.00

F University CS-2. Six 5″ speakers. Plastic enclosure. 30-watts peak. 8 ohms. Gray. 41⅜x11⅞x7¾″.
12 A 7421 U. Shpg. wt., 14 lbs. 59.70

University CSO-4 Indoor/Outdoor Column. Four 8″ speakers, 9.4-oz. magnets. 75-watts peak. 8 ohms. Acrylic finish steel. Size, 41⅜x11⅞x7¾″.
12 A 7944 U. Shpg. wt., 40 lbs. 149.40

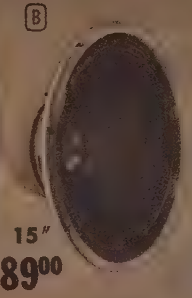
Top quality Musical Instrument Speakers

ec Lansing Speakers for guitar, bass

odel 417-8C. 12″ professional-quality instru-
ent speaker. Handles 75-watts music power; 3″
wound voice coil; 10½-lb. magnet structure;
aluminum frame and dome; 8 ohms. Can be
front or back mounted. Shpg. wt., 19 lbs.
3198 U. 79.00

odel 418B. 15″ musical instrument speaker de-
ned for professionals who demand the finest.
be used with amplifiers rated up to 100 watts.
specs. as above. Shpg. wt., 19 lbs.
3186 U. 89.00

odel 421A. Heavy-duty deluxe 15″ bass speaker.
ecially designed for string bass and organ re-
uction. 100 watt power rating. 17½-lb. magnet
cure. Other specs as above.
3181 U. Shpg. wt., 26 lbs. 105.00



Jensen super-lifetime Musical Instrument Speakers

rt-Vibranto® Series. Special voice coil coated
high-temperature enamel, wound on fiber-
bobbin, withstands high ambient tem-
ure produced by overtones. Stress-resistant
has treated edge for smooth response. All
heavy-duty Synox-6® magnets except
Model LMI-152 which has Alnico V
et. All with break-proof leads to speaker
nals. Impedance, 8 ohms. *For guitar
†for guitar, accordion; §for bass guitar
string bass.

Stock No.	Mfr's Type	Fig.	Size	Magnet Weight	Peak Power (Watts)	Mounting Hole	Wt., Lbs.	EACH
16 A 3157	MI-81*	D	8″	10 oz.	25	6¾″	4	17.07
16 A 3158 X	MI-101*	E	10″	10 oz.	30	8¾″	4	18.00
16 A 3159 X	MI-120§	F	12″	1 lb.	50	10½″	7	25.11
16 A 3160 X	MI-122†	F	12″	1 lb.	50	10½″	7	25.11
16 A 3161 X	LMI-122§	G	12″	1¾ lbs.	100	10½″	8½	38.85
16 A 3162 X	LMI-125†	G	12″	1¾ lbs.	100	10½″	8½	38.85
16 A 3163 X	MI-150§	H	15″	1¾ lbs.	60	13¼″	11	36.36
16 A 3164 X	MI-151†	H	15″	1¾ lbs.	60	13¼″	10½	36.36
16 A 3165 U	LMI-152§	J	15″	3½ lbs.	100	13¼″	17½	74.97

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5″
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SRO-15 15″ Speaker. For
duty replacement use. Re-
es natural tones and special
Boasts large, heavy 4-lbs.
ceramic magnet and edge-
copper voice coil. 60 watts
uous, 150 watts peak. 8-16
Requires 13½″ mtg. hole.
530 U. Wt., 29 lbs. 99.00

SRO-12 12″ Speaker. Large
Alnico V magnet, edge-
copper voice coil. 60 watts
uous, 150 watts peak. 8-16
Requires 11″ mtg. hole.
531 U. Wt., 19 lbs. 88.00

University 12″ Musical Instrument Speaker

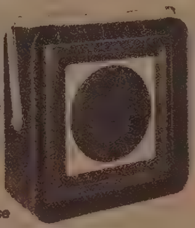
59⁷⁰

Model GS-100 12″. Designed to give today's high quality young sound with the high power handling capacity demanded by today's progressive instrumentalists. Special design techniques allow heat to be dissipated before damage can occur. 2″ hardened aluminum voice coil operates in a massive 8½-lb. magnet structure. 100-watt rms power handling capacity. Breakdown-proof seamless molded cone construction. Impedance, 8 ohms. Requires 11″ mounting hole; depth, 4½″. Shpg. wt., 12¼ lbs.
16 A 3199 X. 59.70

Super-Caster Portable

119⁹⁵

Molded polyester case



Electro-Voice "Super-Caster." For use on stage outdoors or indoors. 12″ speaker in bass reflex enclosure is designed to take extremely high power input and deliver high sound pressure output. Handles 160-watts peak power input. Weatherproof and fungus resistant. Tough, attractive black matte finish with brushed aluminum trim panel. Chrome handle and positioning knobs. Impedance, 8 ohms. Includes 18′ connecting cable with ¼″ phone plugs at both ends. Size, 21½x21½x8½″.
16 A 3473 U. Wt., 39 lbs. . . . 119.95

These Tape Players have built-in burglar alarms!

Ranger, made by Tenna, offers the solution to theft or damage to your auto tape system. Ranger tape players are now equipped with a built-in burglar alarm which saves you worrying while it protects your investment. Here's how these latest Ranger tape players provide you with maximum protection.

Should an unauthorized person remove a properly installed Ranger player from your car, he will trip an alarm which sounds your car's horn until the alarm is reset. Continuous and conspicuous noise will scare off any would-be thief and discourage theft or tampering. Don't be without this important Ranger feature!

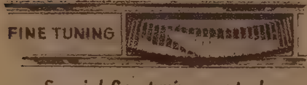
Ranger features

VOLUME
TONE
TUNING

Thumbwheel-type controls comply with the latest Federal safety regulations

CHANNEL
1
2
3
4

Illuminated channel indicator



Special fine-tuning control

Ranger brings you thrilling stereo cartridge and FM music for your ca

A Deluxe 4- and 8-track Car Stereo Tape Player

Model RR-42. This cartridge player plays all 4- and 8-track cartridges wi true-to-life realism. Features convenient automatic operation and non-pr truding thumbwheel controls for greater safety. Powerful built-in 20-wa solid-state stereo amplifier delivers wide-range, full-fidelity sound. Volun balance and tone controls let you tailor sound to your taste. Illuminat channel indicator permits easy selection of your favorite music on any pa of the tape. Fine-tuning control moves tape head into precision position eliminate crosstalk and assure full channel separation even on worn ca tridges. Frequency Response, 50-10,000 Hz. Black metal case has chro silver trim. Mounts easily under the dash with the included mounti bracket. Size, 2⅞x7⅞x8″ deep. Order speakers from page 114. For 12 VI positive or negative ground. From Japan.

19 A 4089 X. Shpg. wt., 12 lbs. .... 79.

B 4- and 8-track Tape Player/FM Radio with Speaker Bon

Model RR-60. *Separately, $144.95* Save $15.00 on car tape cartridge playe FM radio with bonus of four speakers. Features safer thumbwheel contr for volume, balance, tone, FM tuning and tape head fine-tuning. Slide-ru dial flips back to accept tape cartridge. Has 20-watt solid-state ster amplifier; Manual or automatic operation. Monophonic FM converts stereo with optional adapter below. Response: tape, 50-10,000 Hz; FM, 5 15,000 Hz. Mounts under dash with included mounting bracket. Black me case has chrome trim. 2⅞x7⅞x8″. Our car stereo speakers have cloth-r surround and 5.5-oz. ceramic magnets. With four 5¼″ round speakers a chrome grilles. 12 VDC negative ground. From Japan.

19 A 0081 L3U. With Speakers. Shpg. wt., 21 lbs. .... 129.
19 A 4090 U. Player/Radio Alone. Shpg. wt., 13 lbs. .... 119.
19 A 4434. Stereo FM Adapter. Shpg. wt., 3 lbs. .... 29.

C 8-track Player/Stereo FM Radio with Speaker Bonus

Model RR-62. *Separately, $144.95* Save $15.00 on 4- and 8-track stereo ta cartridge player and stereo FM radio with bonus of four speakers. Featu manual or automatic operation, thumbwheel controls, and slide-rule d which flips back to accept cartridge. Solid-state stereo amplifier delivers watts. Volume, balance and tone controls adjust the sound to suit your tas Fine-tuning prevents crosstalk and assures full channel separation even worn tape cartridges. Illuminated channel indicator. Mounts under the da with included mounting bracket. Response: tape, 50-10,000 Hz; FM, 5 15,000 Hz. Size, 2⅞x7⅞x8″ deep. With four of our best 5¼″ round speak and chrome grilles. For 12 volts DC, negative ground. From Japan.

19 A 0096 L3U. With Speakers. Shpg. wt., 20 lbs. .... 129.
19 A 4099 U. Player/Radio Alone. Shpg. wt., 12 lbs. .... 119.

D Compact 4- and 8-track Car Stereo Tape Player

Model RR-59. Mini 4- and 8-track tape player fits in the smallest places b performs with the big models! Features manual or automatic operation a safe, easy-to-use thumbwheel controls. Individual volume controls for ea channel balance the sound while the tone control adjusts the sound to s your taste. Selector control and illuminated channel indicator make it ve easy for you to choose your favorite from any part of the tape cartrid Fine-tuning control properly positions the tape playback head to elimina annoying crosstalk and assure full channel separation on worn tape ca tridges. Solid-state stereo amplifier delivers 20 watts. Response, 50-10,000 H Size, only 3x5x6⅞″ deep. With universal mounting bracket and easy- follow mounting instructions. Order speakers from page 114. For 12 vo DC, negative ground. From Japan.

19 A 4096 X. Shpg. wt., 10 lbs. .... 79.

E Mini 8-track Stereo Tape Player

RR-45T. Mini player fits anywhere space is at a premium, but performs l bigger models. Plays all 8-track cartridges with full stereo realism. Featu manual or automatic operation. Illuminated channel indicator. Volume, b ance and tone controls permit tailoring the sound to your particular tast Channel selector and indicator make it easy to choose your favorite mu from any part of the tape. Fine-tuning control brings the tape playb head into proper position to prevent crosstalk and assure maximum chan separation even on worn cartridges. Has powerful, built-in 20-watt sol state stereo amplifier. Response, 50-10,000 Hz. 3x5x6⅞″. With univer mounting bracket and easy-to-follow instructions. Order speakers from p 114. For 12 volts DC, positive or negative ground. From Japan.

19 A 4036 X. Shpg. wt., 9 lbs. .... 59.

Allied is headquarters for everything in tape playe

95 $5 monthly*

SELECTOR
VOLUME
TONE
BALANCE
1 2 3 4
RANGER STEREO

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speakers with
-60 or RR-62

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SELECTOR
VOLUME
TONE
TUNING
BALANCE

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FINE TUNING
BALANCE
MONO
STEREO

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D

79^{95}
$5 monthly*

E

59^{95}
$5 monthly*

e page 438 for full Credit details

Stereo FM Cartridge

59^{95}

AM Tuner Cartridge

24^{95}

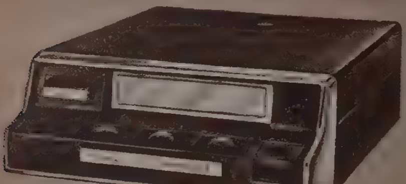
FM-AM Tuner Cartridge

46^{95}

Stereo FM Tuner Cartridge. Instantly converts any tape player on this page to rich-sounding stereo-FM radio. Solid-state. Slide-rule dial for easy tuning. Powered by tape player. From Japan.
19 A 4599 S. Shpg. wt., 1½ lbs. **59.95**

AM Tuner Cartridge. Converts your tape player to AM radio at a modest price. Slides in like regular cartridge. Illuminated slide-rule dial. With batteries. Japan.
19 A 4246 S. Shpg. wt., 1 lb. **24.95**

Monophonic FM-AM Tuner Cartridge. For any 4- or 8-track tape player. Solid-state. Provides excellent reception of AM and FM. AFC locks-in FM stations. With batteries. From Japan.
19 A 4022 S. Shpg. wt. 1 lb. **46.95**



89^{95}

4- and 8-track Stereo Tape Cartridge Player

Craig 3116. Hear your favorite music anywhere, anytime, on 4- or 8-track stereo tape cartridges. This compact tape player delivers brilliant stereo through a powerful 22-watt amplifier. So easy to hear music on-the-go . . just insert cartridge into slot and you're ready for today's sounds in stereo. Tape programs change automatically or at the touch of a pushbutton. Ejector for easy cartridge removal. Volume, balance, and tone controls. Frequency response: 70-10,000 Hz. Order speakers from page 114. Mounts under dash (bracket included). Size, 2⅞x 7¾x10½". 12 VDC negative ground. Japan.
19 A 4606 X. Shpg. wt., 10 lbs. **89.95**

Craig 3117 Stereo 4- and 8-track Tape Player/ Stereo FM Radio. Offers total mobile entertainment. 22-watt player features automatic operation and track-changing. Radio has AFC on FM, slide-rule dial. 70-10,000 Hz. Order speakers from page 114. 3¾x7¾x 10½". 12 VDC negative ground. Japan.
19 A 4607 U. Shpg. wt., 10 lbs. **139.95**

A 4*/8-track Stereo Tape Player with Speaker Bonus

Separately, Was $104.95. **Automatic Radio SCE-6804.** Plays all 8-trac cartridges, plus 4-track cartridges with *Gidget adapter (includec Accepts AM or FM-stereo tuner cartridges at left. Automat operation; safe thumbwheel controls; 8-watt solid-state amplifie 50-15,000 Hz. Four 5¼" round coax speakers have tweeter, chron grille. 2x7x8". With mounting bracket. Japan.
19 A 0040 L3U. Player with Speakers. Shpg. wt., 13 lbs. . . . . **89.**
19 A 4598 X. Player Alone. Shpg. wt., 10 lbs. . . . . **79.**

B "Mini" 4*/8-track Stereo Tape Cartridge Player

Automatic Radio MNE-6725. Compact tape player for auto or bo Plays 8-track stereo cartridges, plus 4-track cartridges with *Gidg adapter (included). Powerful stereo amplifier produces 6 watts to music power. Order speakers from page 114. Solid-state circu 50-15,000 Hz. Volume, tone, separation controls. 12 VDC negati ground. 8x6½x3". Japan.
19 A 4267 X. Shpg. wt., 10 lbs. . . . . **59.**

C 4*/8-track Home/Car Stereo Tape Cartridge Playe

Automatic Radio GES-8111. Versatile 4*/8-track stereo tape play for your car converts instantly to home player (with AC adapt below). Plays 8-track stereo cartridges, plus 4-track cartridges wi *Gidget adapter (included). Handsome styling with fully automa operation. 8-watt solid-state stereo amplifier. Convenient, safety-ty thumbwheel controls—volume, tone, left-right and front-rear b ance. Channel selector button; backlighted channel indicator. F sponse: 50-15,000 Hz. Special "slipout" mounting bracket for insta conversion to home use. With four speakers, chromed grilles, brack with lock and key. Walnut finish case, 3¾x8½x8". 12 VDC negati ground. Japan.
19 A 4019 U. Shpg. wt., 13 lbs. . . . . **109.**
19 A 4250. 117 VAC Adapter. Shpg. wt., 4 lbs. . . . . **27.**
19 A 4003. Car Floor Mount. Shpg. wt., 5 lbs. **8**

D 4*/8-track Stereo Tape Player/Stereo FM Radi

Automatic Radio EMX-6810. Combination tape player and FM rad Plays 8-track stereo tape cartridges, plus 4-track cartridge wi *Gidget adapter (included). Radio tunes stereo FM and monopho FM. Volume, tone, and balance controls. Solid-state stereo a plifier delivers 8 watts of music power. Special indicator light te you when you are tuned to FM stereo broadcast. Illuminated chan indicator. Response: 50-15,000 Hz. With mounting bracket. 7 7x2½". 12 VDC neg. ground. Order speakers from page 114. Fr Japan.
19 A 4601 U. Shpg. wt., 10 lbs. . . . . **119.**

E 4- and 8-track Stereo Tape Cartridge Player

Automatic Radio CFE 8001. Automatically plays all 4- and 8-tra stereo cartridges, without need for adapters. Easy operation—ins tape cartridge to begin play—depress "Off" button to eject c tridge. Automatic or manual channel selection. Has 10-watt sol state stereo amplifier; volume, tone, separation controls; light channel indicator. Response: 50-15,000 Hz. Bracket for easy inst lation under dash. 14x11½x7½". For 12 VDC negative grou Order speakers from page 114. Japan.
19 A 4005 X. Shpg. wt., 11 lbs. . . . . **79.**

F 8-track Stereo Tape Player/Stereo FM Radio

Craig 3119. Stereo tape player accepts all 8-track cartridges. Ster FM radio for complete auto entertainment. Pours out a full 22-wa of music power. Player has automatic operation and track selecti FM radio provides excellent stereo reception with AFC to preve station drift; slide-rule dial. Volume, balance, and tone contr Frequency response: 70-10,000 Hz. Order speakers from page 1 Overall size, 3¾x7¾x10½". With mounting bracket. 12 V negative ground. From Japan.
19 A 4608 U. Shpg. wt., 10 lbs. . . . . **119.**

G 8-track Stereo Tape Cartridge Player/Stereo FM Rad

Gibbs CR-627. Deluxe tape player with FM radio. Fully automat Plays through 12-watt solid-state stereo amplifier. Excellent fideli with 70-10,000 Hz frequency response. Radio provides fine stereo F with AFC control to prevent drift; channel separation. Volume, to balance controls. Track indicator lights, manual channel select Stereo FM indicator light. Black leatherette case with brush chrome trim. With mounting bracket. For 12 VDC negative grou Order speakers from page 114. Japan.
19 A 4057 U. Shpg. wt., 13 lbs. . . . . **129.**

njoy the thrilling sound and convenience of Stereo Tape and FM Radio in your car

ith
akers
95

Player Alone
79^{95}

Save $15
With Speakers

STEREO
AUTOMATIC RADIO
VOLUME
BALANCE
TONE

A

B Compact 4*/8-track Auto Player 59^{95}

VOLUME
TONE
BALANCE
BALANCE

C Tape Player for Home/Car 109^{95} less adapter

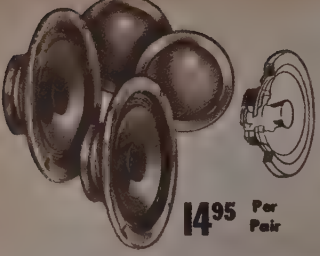
D Tape Player with Stereo FM 119^{95}

E 4- and 8-track Car Tape Player 79^{95}

F 8-track Player with Stereo FM 119^{95}

G 8-track Player with Stereo FM 129^{95}

Values in Car Stereo Speakers



14^{95} Per Pair

Our finest car stereo Speakers

For the best in-car stereo realism. Features 5¼″ round speakers with extra-powerful 5.5-oz. ceramic magnet. Cloth-cones edges for deeper bass. Can be mounted in car doors without removing panels. 10-watt capacity. With two speakers, two grilles, hardware, instructions. Wt., 4 lbs.

19 A 4119..............Per Pair 14.95

12^{50} Per Pair

Deluxe car stereo Speakers

Good hi-fi sound at a low price. High-quality 5¼″ round speakers have 3-ounce ceramic magnet for plenty of power handling ability and sensitivity. Handle 8 watts per speaker. With two speakers, two grilles, color-coded wiring harness, hardware and instructions. Wt., 2½ lbs.

19 A 4023..............Per Pair 12.50

8^{95} Per Pair

Economy car stereo Speakers

A fine speaker outfit for great soun from tapes and radio. 5″ speakers hav 3-oz. ceramic magnet; handle 8 wat per speaker. Speakers mount easily i car doors without removing doo panels. With two speakers, plast grilles, hardware, instructions. Shp wt., 3 lbs.

19 A 4120...............Per Pair 8.9

Per Pair 7^{95}

"Instant-mount" Speakers

A great value. High-quality 5¼″ speakers for use with any car stereo player. Deliver wide-range sound. Low-profile enclosures permit simple installation; excellent for mounting on rear panel-shelf. No cutting or fitting necessary. Enclosures, 7½x7½″, tapered 3″ to 1¼″. Shpg. wt., 4 lbs.

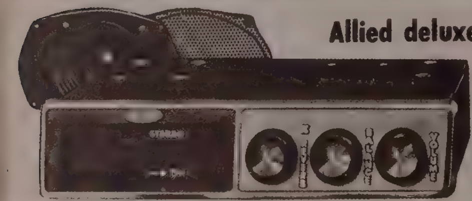
19 A 4259 X..........Per Pair 7.95

Set of Four 8^{95}

Custom in-door Speaker Set

Easy "do-it-yourself" installatio Four heavy-duty 5″ round cerami magnet speakers. Mount underdas underseats, on kick panels, doors, rear package shelf. With grilles. I cludes all necessary cables, mounti hardware and self adhering tape f "in-door" installation. Shpg. wt., lbs.

19 A 4699............Set of Four 8.9



Allied deluxe solid-state car stereo Reverberation System

29^{95}

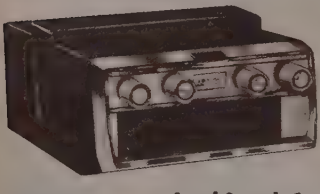
$5 monthly*

Adds thrilling extra dimension of realism to any c stereo tape player or stereo FM radio. Mixes sou from each channel, delays it through rear speake Volume, balance, Reverb controls—pilot lights f "On" and "Stereo." 1¾x8x5¾″. With 6″ speaker 6x9″ adapter board, grille. 12 VDC neg. ground.

19 A 4579. Shpg. wt., 6 lbs. ....29.

19 A 4133. Above, without speaker. 5 lbs. ......28.

Economy-priced car Stereo Tape Cartridge Players



56^{95}

4 and 8-track Car Stereo Tape Player

Automatic Radio SEL-9606. 8-watt solid-state stereo tape player plays all 8-track cartridges in magnificent stereo sound, and any 4-track cartridge with Gidget adapter (included). Automatic and manual channel control for changing tape selections. Cartridge ejector; volume tone, balance controls. Response, 70-12,000 Hz. Order speakers above. Mounting bracket. 3x5½x 7″. 12 VDC neg. gnd. Japan. Shpg. wt., 10 lbs.

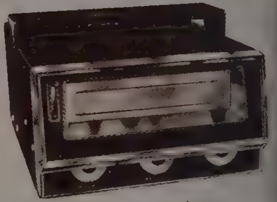
19 A 4609....................56.95

59^{95}

Budget 8-track car Stereo Tape Player

Gibbs 332B. 8-track player boasts automatic operation; 12-watt solid-state stereo amplifier; black leatherette case with brush chrome trim. Plays all standard 8-track stereo tapes with excellent fidelity. Has volume, tone balance controls; manual channel selector. Response, 70-10,000 Hz. Wow and flutter, less than 0.3%. 8¾x 8⅛″. For 12 VDC negative ground. Order speakers above. From Japan. Shpg. wt., 11 lbs.

19 A 4602 X..................59.95



56^{95}

Compact 8-track ca Stereo Tape Player

Ranger RR-47T. Offers exceptional sou and distinctive styling. Handso compact case is designed for moun ing where space is limited. Has 3-wa solid-state stereo amplifier; illum nated channel selector switch; aut matic electronic channel-transfer. H balance, Dual-channel volume a tone controls. Wow and flutter le than 0.35%. 40-12,000 Hz. 3x5x6 Mounting bracket. 12 VDC neg. gr Order speakers above.

19 A 4025 X. Shpg. wt., 10 lbs...56.

*See page 438 for full Credit deta

-track Cartridges, Accessories

de selection by famous artists,
ome or car stereo tape players

from the most popular tunes of today. s a wide selection by famous artists for ype of listening enjoyment. All cartridges at 3¾ ips. *Indicates Twin-Pack, idge equivalent to two full stereo LP's. g. wt., 6 oz.

Low as 5^{89}

INSTRUMENTALS—EASY LISTENING

No.	Title	Artist	EACH
71 S	Whipped Cream and Others	Tijuana Brass	5.89
90 S	Sounds Like the Tijuana Brass	Tijuana Brass	5.89
74 S	Going Places	Tijuana Brass	5.89
14 S	The Beat of the Brass	Tijuana Brass	5.89
75 S	Golden Hits	Mantovani	5.89
15 S	Memories	Mantovani	5.89
16 S	Mantovani Touch	Mantovani	5.89
81 S	Best of H. Mancini	H. Mancini	5.89
84 S	*Lovers/Martinis/Memories	Jackie Gleason	8.49
77 S	The Best of Billy Vaughn	Billy Vaughn	5.89
80 S	Boots with Strings	Boots Randolph	5.89
81 S	Best of Al Hirt	Al Hirt	5.89
91 S	Love Rhapsodies	Midnight String Quartet	5.89
17 S	The Look of Love	Midnight String Quartet	5.89
92 S	Greatest Hits	Leonard Bernstein	6.89
93 S	Greatest Hits	Eugene Ormandy	6.89
18 S	Fool on a Hill	Sergio Mendes	5.89
19 S	Do You Know the Way to San Jose	Baja Marimba	5.89
20 S	Bloomin Hits	Paul Mauriat	5.89
21 S	Prevailing Airs	Paul Mauriat	5.89

TODAY'S SOUND—TEEN FAVORITES

No.	Title	Artist	EACH
69 S	Greatest Hits, Vol. 1	Supremes	5.89
70 S	Greatest Hits, Vol. 2	Supremes	5.89
50 S	Join the Temptations	Supremes	5.89
51 S	Love Child	Supremes	5.89
13 S	Golden Hits	The Ventures	5.89
18 S	Greatest Hits	The Temptations	5.89
71 S	Sounds of Silence	Simon/Garfunkle	5.89
72 S	Parsley, Sage, Etc.	Simon/Garfunkle	5.89
52 S	*Beatles	The Beatles	11.89
53 S	Yellow Submarine	The Beatles	5.89
54 S	Sgt. Pepper's Lonely Hearts Club Band	The Beatles	5.89
55 S	Beggars Banquet	Rolling Stones	5.89
56 S	Supper Session	Mike Bloomfield	5.89
57 S	Electric Lady Land	Jimi Hendrix	8.89
58 S	Realization	Johnny Rivers	5.89
59 S	Greatest Hits	James Brown	7.89
60 S	Boogie with	Canned Heat	5.89
61 S	Living the Blues I	Canned Heat	5.89
62 S	Living the Blues II	Canned Heat	5.89
63 S	Steppenwolf 2nd	Steppenwolf	5.89
64 S	Wild Flowers	Judy Collins	5.89
65 S	Greatest Hits	Petula Clark	5.89
66 S	Golden Ear II	Mamas and Papas	5.89
67 S	Greatest Hits	Rascals	5.89
68 S	Greatest Hits	Association	5.89
69 S	Wheels of Fire Vol. II	The Cream	5.89
70 S	Disraeli Gears	The Cream	5.89
71 S	In-A-Gadda-Da-Vida	Iron Butterfly	5.89
72 S	Stone Soul Picnic	5th Dimension	5.89
73 S	Incredible	The Union Gap	5.89
74 S	Super Hits Vol. I	Various Artists	5.89
75 S	Super Hits Vol. II	Various Artists	5.89
76 S	Super Hits Vol. III	Various Artists	5.89
77 S	Late Again	Peter, Paul & Mary	5.89

POPULAR VOCALS

Stock No.	Title	Artist	EACH
19 A 4630 S	Happening in Central Park	Barbra Streisand	6.89
19 A 4333 S	The Very Best of Connie Francis	Connie Francis	5.89
19 A 4103 S	Valley of the Dolls	Dionne Warwick	5.89
19 A 4631 S	Promises Promises	Dionne Warwick	5.89
19 A 4102 S	Lady Soul	Aretha Franklin	5.89
19 A 4501 S	That's Life	Frank Sinatra	5.89
19 A 4632 S	Greatest Hits Vol. I	Frank Sinatra	5.89
19 A 4633 S	Cycles	Frank Sinatra	5.89
19 A 4326 S	Everybody Loves Somebody	Dean Martin	5.89
19 A 4634 S	Gentle on my Mind	Dean Martin	5.89
19 A 4635 S	Greatest Hits, Vol. I	Dean Martin	5.89
19 A 4505 S	My World	Eddy Arnold	5.89
19 A 4506 S	Best of Eddy Arnold	Eddy Arnold	5.89
19 A 4636 S	Walkin in Love Land	Eddy Arnold	5.89
19 A 4507 S	My Cup Runneth Over	Ed Ames	5.89
19 A 4637 S	Apologize	Ed Ames	5.89
19 A 4508 S	Greatest Hits	Johnny Cash	5.89
19 A 4638 S	TV Special	Elvis Presley	5.89
19 A 4639 S	Golden Records I	Elvis Presley	5.89
19 A 4640 S	Golden Records IV	Elvis Presley	5.89
19 A 4641 S	Wichita Lineman	Glen Campbell	5.89
19 A 4642 S	By the Time I Get to Phoenix	Glen Campbell	5.89
19 A 4643 S	Gentle on my Mind	Glen Campbell	5.89
19 A 4644 S	Feliciano	Jose Feliciano	5.89
19 A 4645 S	Souled	Jose Feliciano	5.89
19 A 4646 S	Special Request	The Lettermen	5.89
19 A 4647 S	Going Out of my Head	The Lettermen	5.89
19 A 4648 S	Greatest Hits I	Johnny Mathis	5.89
19 A 4649 S	Honey	Johnny Mathis	5.89

JAZZ

Stock No.	Title	Artist	EACH
19 A 4296 S	Time Out	Dave Brubeck	5.89
19 A 4486 S	A Day in the Life	Wes Montgomery	5.89
19 A 4487 S	Best Of	Wes Montgomery	5.89
19 A 4622 S	Willow Weep for Me	Wes Montgomery	5.89

SOUNDTRACKS

Stock No.	Title	Artist	EACH
19 A 4297 S	Sound of Music	Original Track	6.89
19 A 4301 S	Dr. Zhivago	Original Track	6.89
19 A 4623 S	Space Odyssey 2001	Original Track	7.89
19 A 4624 S	Funny Girl	Original Track	6.89
19 A 4625 S	Finian's Rainbow	Original Track	6.89
19 A 4626 S	Camelot	Original Track	6.89
19 A 4627 S	Mission Impossible	TV Soundtrack	5.89

PIANO AND ORGAN

Stock No.	Title	Artist	EACH
19 A 4404 S	Ebb Tide	Earl Grant	5.89
19 A 4628 S	Only For Lovers	Roger Williams	5.89
19 A 4629 S	More than a Miracle	Roger Williams	5.89

dget" 4-track
track Adapter

2^{98}

es the versatility
tape player. Lets
y the lower priced
rd 4-track car-
on 8-track-only
s. Simple inser-
nd removal from
cartridges. With
structions. Shpg.
oz.
551..........2.98

RCA Head-Cleaning Tape Cartridge

1^{95}

Keep your player in top professional condition. Insert in player like regular cartridge. Tape moves across heads to remove oxides, dirt, oil and other harmful particles. Not for 4-track-only models. Shpg. wt., 4 oz.
19 A 4269 S.........1.95

Burglar Alarm System for car tape players

7^{95}

Protect your valuable car tape player against theft with this unique alarm. Protects any 12-volt stereo car tape system. "Squealer" connects easily, provides loud horn-alarm if tape unit is tampered with. Shpg. wt., 10 oz.
19 A 4117..........7.95

Rubbermaid® Cartridge Holder

Holds up to 10 cartridges

5^{95}

Provides ideal storage for 4- or 8-track cartridges. Stores up to 10 cartridges. Keeps tape library organized and cartridges dust-free. Molded carrying handle, Plastic case, vinyl top. 13x5x6".
19 A 4118 X. Wt., 2 lbs......5.95

age 158 for selection of pre-recorded tape cassettes

Enjoy full-fidelity stereo music in your car with one of these Car Tape Cassette Playe

Cassette by TENNA

A Built-in burglar alarm sounds car's horn to scare off would-be thieves

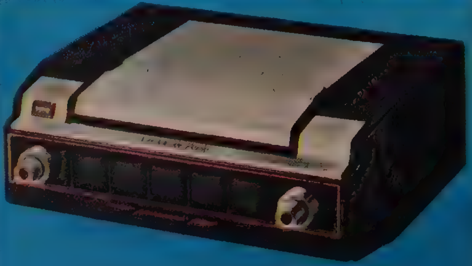
99^{95}

$5 monthly*

B Thumbwheel-type volume, balance and tone controls are safe and easy to use

79^{95}

$5 monthly*



C Special narrow-gap head for extended-range frequency response

99^{95}

$5 monthly*

D Automatic cassette eject and pushbuttons for safe, convenient operation

119^{50}

$6 monthly*

Stereo FM Car Radios at low Allied prices

E Sensitive front end plus four IF stages assure noise-free reception

99^{95}

$5 monthly*

F Delivers sensitive, noise-free FM reception plus clear, wideband AM

129^{95}

$7 monthly*

*See page 438 for full Credit details . . Buy with no money d

A) Tenna Car Stereo Tape Cassette Player

el R-100C. This car cassette player includes a built-in alarm
em to discourage theft. Has instant cassette loading and auto-
c or manual ejection at end of play. Fast forward and fast
rse let you find any selection on the tape cassette in just
nds. Non-protruding thumbwheel controls for volume, bal-
and tone let you adjust the sound to suit your personal
. Powerful built-in solid-state stereo amplifier develops 10
s. Response 50-10,000 Hz. Mounts under dash with included
ket. Size, 2x7x8″ deep. For 12 VDC negative ground. Order
kers from page 114. Japan.
4035 X. Shpg. wt., 10 lbs.........................**99.95**

Automatic Radio Car Stereo Cassette Player

el CRS-9440. Compact cassette player plays standard mono-
iic or stereo cassettes with true-to-life realism. Non-pro-
ing thumbwheel volume, balance and tone controls let you
r stereo to your taste. Fast forward and reverse pushbuttons
ou find any selection with ease. Automatic cassette ejection,
security device that locks in cassette when ignition key is
ved. Solid-state stereo amplifier delivers 8 watts music power.
nts under dash with included mounting bracket. 2-¾x6-
″. For 12 VDC neg. gnd. Order speakers from page 114. Japan.
4028 X. Shpg. wt., 10 lbs.........................**79.95**

Crown Automatic Car Stereo Cassette Player

el CSC-1000. Deluxe cassette player plays all standard mono-
ic or stereo cassettes with full-fidelity realism. Precision
ow-gap playback head assures better high frequency response
lower distortion. Keyboard-type controls for play, stop and
operation. Fast forward and rewind let you find any selec-
on the tape in no time at all. Volume, balance and tone
rols adjust the sound to taste. Stereo amplifier delivers 10-
output. Response, 70-10,000 Hz. Dash mounting bracket is
oped with security lock. Size, 3x7½x8″. For 12 VDC nega-
ground. Order speakers from page 114. From Japan.
4604 U. Shpg. wt., 8 lbs.........................**99.95**

Sony/Superscope Car Stereo Cassette Player

el TC-20. Instant-load model plays standard monophonic or
o cassettes with hi-fi realism. Pushbuttons for stop, fast for-
. and reverse let you find any selection on cassette in a matter
conds. Volume, balance and tone controls let you adjust the
d to suit your taste. Cassette ejects automatically at the
of play. Solid-state stereo amplifier delivers 12 watts. Re-
se, 50-10,000 Hz. Flutter and Wow, 0.28%. Signal-to-Noise
o, 45 dB. With tape head cleaning pencil and dash mounting
ket. Size, 2⅞x7³⁄₁₆x8¼″. For 12 VDC positive or negative
nd. Order speakers from page 114. From Japan.
4045 U. Shpg. wt., 7 lbs.........................**119.50**

Car Stereo FM Radio by Automatic Radio

el MXR-8404. Enjoy beautiful stereo FM at the touch of a
on. Multi-ganged tuning condenser and four IF stages assure
tive, noise-free FM reception. Indicator light shows reception
ereo broadcasts. Thumbwheel controls for tuning, volume,
nce and tone. Slide-rule dial and AFC permit fast, pinpoint
ng for finest reception. Powerful built-in solid-state stereo
lifier develops 10 watts to drive any speakers to full volume.
onse 50-10,000 Hz. Separation, 30 dB. Slim design is easy to
nt under the dash. 2x8¾x7″. For 12 VDC negative ground.
r speakers from page 114. Japan.
4037 U. Shpg. wt., 8 lbs.........................**99.95**

F) Tenna pushbutton Stereo FM-AM Radio

el R-12-PBX. Enjoy concert-hall fidelity on stereo FM, and
too, with this quality auto radio. Five pushbuttons let you
t your favorite FM or AM station instantly. Advanced
-state design assures sensitive reception and years of de-
lable service. Stereo indicator light shows reception of
o stations. Volume, balance and tone controls let you adjust
sound to suit your taste. Built-in stereo amplifier delivers 10
s. Response, 50-10,000 Hz. Custom mounts in or under the
. Size, only 2x8½x6½″ deep. For 12 volts DC negative
nd. Order speakers from page 114. Japan.
4048 U. Shpg. wt., 10 lbs.........................**129.95**

109^{95}
$6 monthly*

Kraco Car Stereo Cassette Recorder with microphone

Model KS-999. Plays standard cassettes with life-like fidelity. Also records with dynamic mike included. Thumbwheel controls for volume, balance and tone. Has front-loading, automatic operation with automatic cassette ejection. Power Output: 16 watts. Response, 100-11,000 Hz. With mounting bracket. Order speakers from page 114. Size, 2⅜x8¾x8⅛″. For 12 VDC negative ground. Japan.
19 A 4081 U. Shpg. wt., 6 lbs............**109.95**

Kraco Stereo Eight

79^{95}
$5 monthly*

Kraco deluxe 8-track Car Stereo Cartridge Player

Model KS-888. Plays all standard 8-track cartridges with hi-fi realism. Thumbwheel controls for volume, balance and tone. Illuminated channel indicator makes track selection easy. 16-watt stereo amplifier. 50-11,000 Hz. Mtg. bracket. Order speakers, page 114. 3⅛x7½x7⅞″. 12 VDC neg. gnd. *(Does not play cassettes.)* Japan.
19 A 4083 X. Shpg. wt., 6¾ lbs............**79.95**

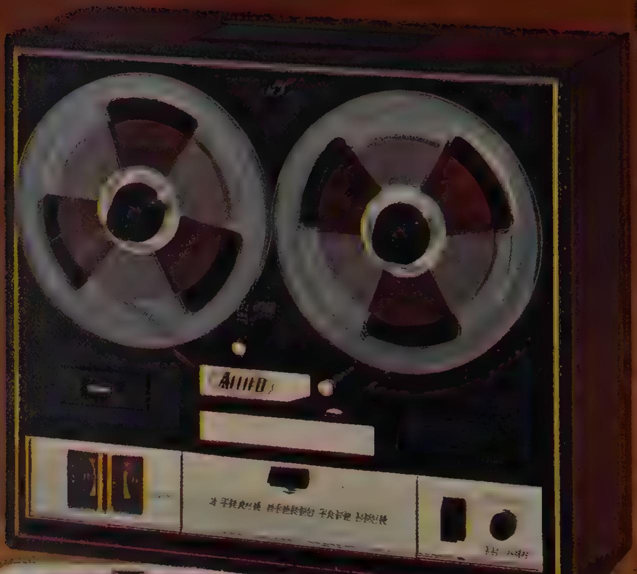
Kraco Space Eight
STEREO

59^{95}
$5 monthly*

Kraco compact 8-track Car Stereo Cartridge Player

Model KS-700. Fits anywhere but performs like bigger models. Pushbutton track selector; volume, balance and tone controls. Powerful 10-watt solid-state stereo amplifier. Response, 70-10,000 Hz. Mounting bracket. Order speakers from page 114. 2⅞x6½x6⅞″. For 12 VDC neg. ground. *(Plays 8-track cartridges, not cassettes.)*
19 A 4082 X. Japan. Shpg. wt., 6 lbs............**59.95**

ed's wide selection of pre-recorded cassettes is on page 158



Save $28.80 on Bonus Offer!

Two Allied 4525 Dynamic Mikes and Carrying Case only $4.95 more

Deck and Bonus 139.95 $7 monthly *see page 438*

135.00 $7 monthly *see page 438*

Allied three-speed Stereo Tape Deck

Model TD-1030. Expand your stereo music system with Allied's deluxe solid-state stereo tape deck and enjoy the luxury of superb music recording and reproduction. Handsome and versatile performer records and plays 4-track stereo and mono at 7½, 3¾ and 1⅞ ips through your hi-fi component system or console. Features automatic end-of-reel shutoff, automatic tape lifters to protect tape heads during fast forward and rewind, dual recording level meters, accurate push-to-reset digital counter, built-in stereo headphone amplifier with volume control, and stereo headphone jack for private listening.

Operates in either a vertical or horizontal position. Has easy-to-operate single-knob control, recording ready light. Inputs: two microphone, two auxiliary. With oiled walnut-veneer wood case, 7″ takeup reel, patch cord, splicing tape, dust cover. For 117 V, 60 Hz AC. Japan.
15 A 7103 U. Shpg. wt., 23 lbs. **135.00**

Deck with Mike Outfit. *Separately, $168.75.* Includes TD-1030 Deck, 2 Allied 4525 Dynamic Mikes, Mike Carrying Case. Mikes have 80-10,000 Hz response; −58 dB output. High impedance. Omnidirectional.
15 A 0082 L2U. Shpg. wt., 26 lbs. **139.95**

SPECIFICATIONS

Speeds: 7½, 3¾, 1⅞ ips. *Frequency Response:* ±3 dB, 30-18,000 Hz at 7½ ips; ±3 dB, 40-12,000 Hz at 3¾ ips. *Flutter/Wow:* less than 0.15% at 7½ ips; 0.25% at 3¾ ips; 0.45% at 1⅞ ips. *Signal-to-Noise Ratio:* 50 dB. *Harmonic Distortion:* below 1%. *Equalization:* NAB at 7½ ips. *Size:* 15½x13½x6¾″.

Allied low-priced Stereo Tape Deck

99.95 $5 monthly *see page 438*

Model TD-1025. Lots of features at remarkable low price! You can bu an impressive tape library by tapi stereo FM broadcasts off the air, by taping your record collection. Y also can tape live performances w mikes. Records and plays 4-tra stereo and mono through your h system or console.

Single control knob for fast-forwa pause, play, record, stop, rever Level controls for each channel, t level meters. Push-to-reset tape cou er. Automatic tape lifters, automa shutoff. Inputs: 2 mike, 2 aux. O puts: 2 line, stereo headphone ja Speeds: 7½, 3¾ and 1⅞ ips. R sponse: 50-16,000 Hz at 7½ ips. Fl ter/Wow: 0.15% at 7½ ips. Si 11⅞x13⅞x7″. Vinyl walnut case. takeup reel, patch cords. For 117 60 Hz AC. Japan.
15 A 7593 U. Wt., 20 lbs. **99**

Allied TD-1025 Recorder with Mike Ou Bonus. *Separately, $133.70.* 2 Alli 4525 Dynamic Mikes, Deluxe Car ing Case. Mike has 80-10,000 response. −58 dB output. High imp ance. Omnidirectional. Japan. Sh wt., 23 lbs.
15 A 0183 L2U **119**

Three-speed reversing Stereo Tape Deck

249.95 $13 month *see page 438*

Model TD-1070. Our finest deck! Au matic-reverse model *records and pl* in both directions without reel tu over. Has solid-state preamps playback through your stereo syst or console, plus stereo headph amplifier with level control. Can set for one complete play and shut continuous replay, or automatic s at a predetermined point.

Automatically equalized response all three speeds. Four heads (two each direction). Has sound-on-sou Level meters, 4-digit counter. Inpu 2 mike, 2 aux. Outputs: 2 line, hea phones. Speeds: 7½, 3¾, 1⅞ Response: 30-20,000 Hz at 7½ Flutter/Wow: less than 0.15% at ips. Size: 12⅝x19x7½″. With wal veneer case. 7″ takeup reel, pa cords. For 117 V, 60 Hz AC. Japa
15 A 7578 U. Wt., 35 lbs. **249**

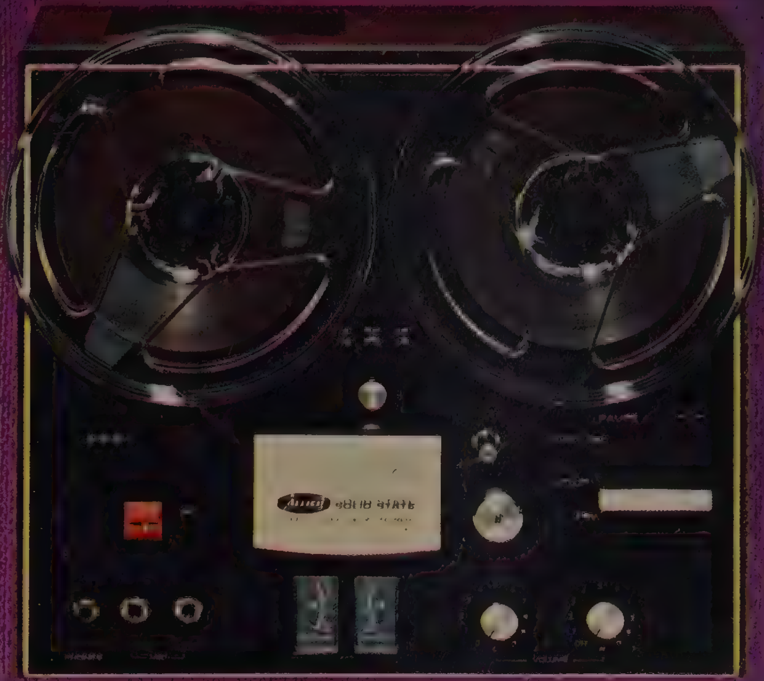
Allied TD-1070 Recorder with Mike O fit Bonus. *Separately, $309.90.* T Allied 3310 Cardioid-Dynamic Mi Deluxe Carrying Case. Mike has 16,000 Hz response. 50,000 ohms pedance. Japan.
15 A 0184 L2U. Wt., 41 lbs. **25**

SHIPPING NOTE Items with suffix U, W or Z in Stock No. sent or express. See Ordering Information p

Save $13.75

D-1025 Deck
lus two Allied
5 Dynamic Mikes
th Carrying Case

$20 more

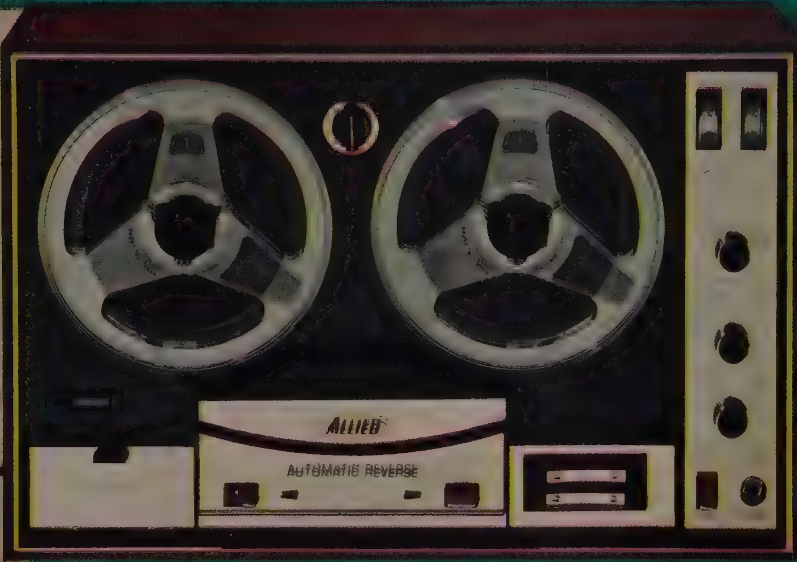

ALLIED solid state

Add tape recording and playback to your music system with an Allied solid-state Stereo Tape Deck

ave $49.95

D-1070 Deck
lus Allied 3310
tereo Mike Outfit

$10 more


ALLIED
AUTOMATIC REVERSE

Three-head solid-state Stereo Tape Deck

Allied® Deck with most-wanted features at a value price

179⁹⁵

- Double lamination playback head
- Tape monitoring, sound-on-sound
- All silicon transistor circuit

Model TD-1095. You'd expect to pay much more for a three-head deck with all these features. Quality-designed to satisfy the critical recording enthusiast. Records four-track stereo or mono; plays through your stereo music system or console. Separate record, play and erase heads permits direct tape monitoring, sound-on-sound, and echo. Also records sound-with-sound. Single-knob function control with instant pause.

Flutterless four-pole motor provides accurate 7½, 3¾, and 1⅞ ips speeds. Slide-type controls adjust easily for accurate recording levels. Illuminated dual comparison level meters. Automatic tape lifters protect heads during rewind and fast forward. Automatic shutoff. Push-to-reset four-digit counter for editing and locating selections easily. Tape monitor switch. Inputs: 2 mike, 2 aux. Outputs: line, stereo headphone jack. 7″ reel capacity. Walnut-grain vinyl covered wood case. 12¾x16x6⅝″. For 117 V, 60 Hz AC. From Japan.
15 A 7574 U. Shpg. wt., 25 lbs. **179.95**

Stereo Tape Deck with Mike Bonus. TD-1095 stereo tape deck with Allied 3311P mike outfit for $5.00 more. Pair of wide-range dynamic mikes, desk stands in custom-fitted case, 13½x11¾x2½″. From Japan.
15 A 0182 L2U. Shpg. wt., 31 lbs. **184.95**

SPECIFICATIONS

Frequency Response: ±3 dB, 30-22,000 Hz at 7½ ips; ±3 dB, 30-12,000 Hz at 3¾ ips. *Flutter/wow:* less than 0.1% at 7½ ips; 0.15% at 3¾ ips. *Signal-to-Noise Ratio:* 48 dB. *Input Sensitivity:* Mike, 0.25 mV; aux., 50 mV. *Harmonic Distortion:* less than 2.1%.

A Compact Sony/Superscope Deck

Model 355. Four-track stereo and mono at 7½, 3¾, 1⅞ ips. Erase, record, playback head arrangement permits direct tape monitoring, sound-on-sound, echo. Scrape flutter filter and non-magnetizing head help eliminate tape modulation and hiss. Level meters, digital counter, automatic tape lifters. Retractable pinch rollers. Noise suppressor switch. Response, 20-22,000 Hz. Flutter/wow, less than 0.09% at 7½ ips. Operates in vertical or horizontal position. Size, $15\frac{3}{16}$x$7\frac{1}{16}$x14″. With walnut wood case, dust cover, and 7″ takeup reel. For 117 V, 60 Hz AC. From Japan.
15 A 7567 U. Shpg. wt., 26 lbs. **199.50**

B Concord Deck with integrated circuits

Model Mk III. Features non-magnetizing long-life heads, hysteresis-synchronous motor. Flutter filter, tape tension arm, automatic shutoff. Automatic tape lifters. Tape/source monitoring. Sound-on-sound switch, echo control. Dynamic Range Expander eliminates tape hiss. Instant pause. Flip-up head cover with gap positions marked for editing. Level meters, counter. Speeds: 7½, 3¾, 1⅞ ips. Response: 20-27,000 Hz at 7½ ips. Wow/flutter: 0.09% at 7½ ips. Inputs: 2 mike, 2 aux. Outputs: line, stereo headphone. Vertical or horizontal operation. 15x19x7″. With dust cover. For 117 V, 60 Hz AC. From Japan.
15 A 7019 U. Shpg. wt., 21 lbs. **239.50**

15 A 7020 U. Mk IV. Above, with automatic reverse play. Dual capstan. Shpg. wt., 39 lbs. **299.50**

C Sony/Superscope deluxe Deck

Model 630-D. Records and plays four-track stereo and mono at 7½, 3¾, 1⅞ ips. Long-life non-magnetizing record, play and erase heads. Sound-on-sound, echo. Tape/source monitor. Scrape flutter filter, noise suppressor switch. Large professional VU meters, push-to-reset four-digit counter, pause control with lock for easy editing. Slide controls for accurate record level settings. Automatic tape lifters, retracting pinch rollers, automatic shutoff. Headphone jack. Response, 20-22,000 Hz at 7½ ips. Flutter and wow, 0.09% at 7½ ips. In Walnut case, 7¼x16x19″. With dust cover, 7″ takeup reel, reel caps, patch cords. For 117 volts, 60 Hz AC. From Japan.
15 A 7584 U. Shpg. wt., 26 lbs. **279.50**

D Ampex Deck with dual capstan drive

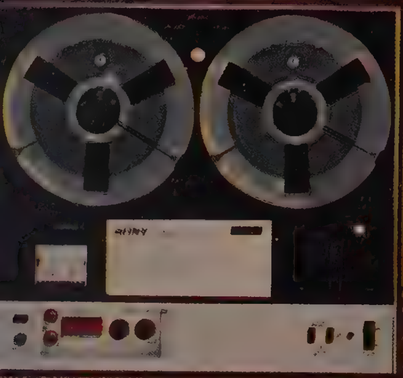
Model 755. Preamps for record/play of 4-track stereo and mono at 7½, 3¾, 1⅞ ips. Long-life deep-gap heads. Tape monitoring, sound-on-sound. Counter, shutoff, level meters, pause control, automatic tape lifters. Response, 20-20,000 Hz at 7½ ips. Flutter/wow, 0.15%. With 7″ takeup reel. 13x15¾x6½″. With deluxe walnut base. For 115 VAC.
15 A 7265 U. Shpg. wt., 29 lbs. **249.95**

Model 1455. Automatic reverse play; automatic threading; four heads (erase, record, play, reverse play). With deluxe walnut base.
15 A 7263 U. Shpg. wt., 29 lbs. **349.95**

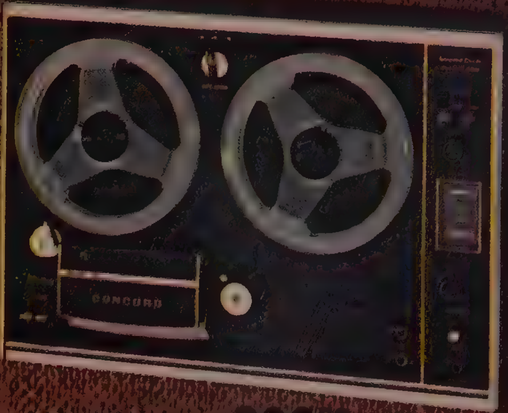
E Teac Deck with three precision motors

Model A-1200. Has preamps for record/play of 4-track stereo and mono at 7½, 3¾ ips. Hysteresis-synchronous capstan motor, two reel motors. Record, play, erase heads. Counter, level meters, automatic shutoff, electrically switched speeds, push-button controls. Double protection against accidental erasure. Tape monitoring, sound-on-sound. Stereo headphone jack. Response: 30-17,000 Hz at 7½ ips. Wow and flutter, 0.12% at 7½ ips. Stainless steel panel for lasting professional appearance. Walnut case, 17x15½x9¾″. For 117 volts, 60 Hz AC
15 A 7450 Z. Shpg. wt., 64 lbs. **299.50**

All tape decks shipped less mikes



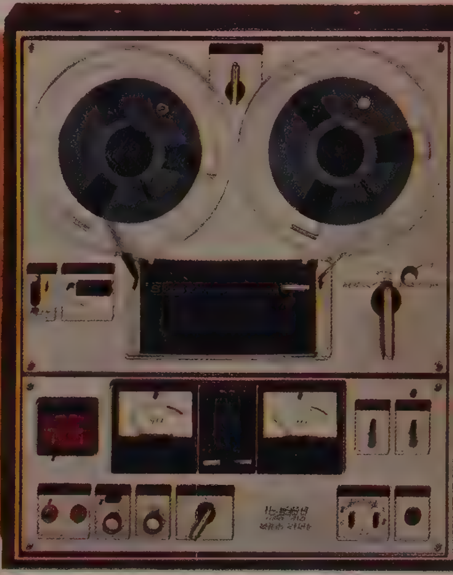
Ⓐ SONY/SUPERSCOPE 199^{50}

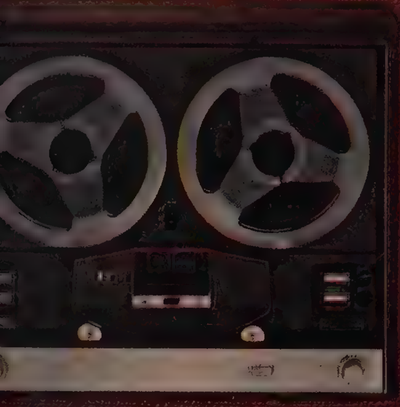


Ⓑ CONCORD 239^{50}

tereo Decks with hree-head design for direct tape onitoring, sound on sound, echo

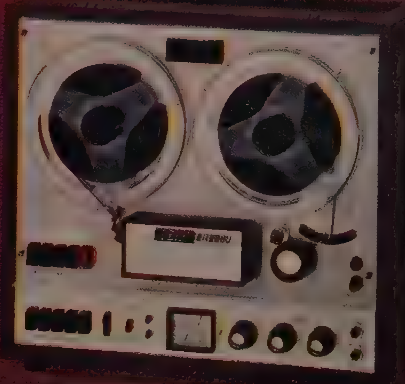
Ⓒ SONY/ SUPERSCOPE 279^{50}





Ⓓ AMPEX 249^{95}

Ⓔ TEAC 299^{50}



Add the versatility of tape to your system . .

CONCORD

Low-priced full-feature Stereo Deck

99^{50}

$5 monthly*

Model 509-D. Solid-state stereo tape deck offers complete 4-track record/play facilities. Plays through your system or console at 7½, 3¾ or 1⅞ ips. Clean, uncluttered styling with two level meters, single-knob function control, digital counter, cue and edit control. Automatic record equalization shift with speed change. Flux-field heads assure finest sound quality. 7½ ips: 30-15,000 Hz; Flutter/Wow, less than 0.17%. Walnut case. 11x13¾x4⅞". 117 VAC. Japan.
15 A 7496 X. Shpg. wt., 16 lbs....................99.50

SONY/ SUPERSCOPE

2-speed Stereo Tape Deck

119^{50}

$6 monthly*

Model 252-D. Value-priced stereo tape deck records and plays 4-track stereo or mono through your system or console at 7½ or 3¾ ips. Has sound-with-sound capability, stereo headphone monitor jack, dual level meter, single-knob control, automatic tape lifter, automatic shutoff, digital counter. Non-magnetizing record/play head reduces tape hiss. 2 mike, 2 aux. inputs. 7½ ips: 30-18,000 Hz; Flutter/Wow, 0.12%. 52 dB S/N. Walnut case. 7½x15¼x13½". 117 VAC. Japan.
15 A 7557 U. Shpg. wt., 18 lbs..................119.50

WOLLENSAK

3-speed Stereo Tape Deck with 2-motor drive

159^{95}

$8 monthly*

Model 6120. Beautifully-styled deck features two motors for precise 7½, 3¾ and 1⅞ ips speeds. Records and plays 4-track stereo or mono through your system or console. Has convenient open-front threading. Electro-dynamic brakes, tone and pause controls, counter, automatic shutoff, stereo headphone jack, two level meters. Mike and preamp inputs; line outputs. 7½ ips: Response, 40-20,000 Hz; Flutter and Wow, 0.15%. With walnut-finish wood case, 7" takeup reel. 13x16x5". 117 VAC.
15 A 7571 U. Shpg. wt., 23 lbs...................159.95

SONY/ SUPERSCOPE

3-speed Stereo Tape Deck

159^{50}

$8 monthly*

Model 255. Sony quality and features at a moderate price Records and plays 4-track stereo or mono through you system or console at 7½, 3¾, 1⅞ ips. Records sound-with sound. Two level meters, digital counter, automatic tap lifters. Scrape-flutter filter cuts distortion. Non-magnetizing head circuit helps prevent tape hiss. Easy-threadin retract-o-matic pinch roller. 7½ ips: 30-18,000 Hz; Flutter Wow, 0.09%. Dust cover, walnut case. 15⅜x7¼x13¾ 117 VAC. Japan.
15 A 7566 U. Shpg. wt., 24 lbs..................159.5

ROBERTS

All-silicon 3-head Stereo Tape Deck

179^{95}

$9 monthly*

Model 450. All-silicon-transistor deck boasts professional three-head design to permit direct monitoring and recording sound-with-sound. Records and plays 4-track stereo or mono through your system or console. Dynamically-balanced split-capacitor motor for precise 7½, 3¾, 1⅞ ips speeds. Record level meters, stereo headphone jack, instant stop, automatic shutoff. 7½ ips: 15-15,000 Hz; Flutter/Wow, 0.2%. Wood case. 11⅞x15¾x5½". 110/240 V, 50-60 Hz. Japan.
15 A 7032 U. Shpg. wt., 26 lbs..................179.95

SONY/ SUPERSCOPE

Stereo Tape Playback Deck

99^{50}

$5 monthly*

Model 155. Loaded with features for superb playback o prerecorded 4-track stereo tapes through your system or console at 7½, 3¾ or 1⅞ ips. Retractable pinch rolle simplifies threading. Non-magnetizing heads and scrape-flutter filter reduce distortion and hiss for cleaner sound. Automatic tape lifters, digital counter, automatic shutoff. 30-18,000 Hz at 7½ ips. Walnut case. 15⅜x6¾x12½". 117 VAC. Japan. *Plays back recorded tapes only—does not record.*
15 A 7558 X. Shpg. wt., 17 lbs..................99.5

**See page 438 for full Credit detail*

with a solid-state Stereo Tape Deck

PANASONIC

Stereo Tape Deck with three-heads

179^{95}

$9 monthly*

RS-768. Record and play 4-track stereo and mono
h your music system or console at 7½, 3¾ or 1⅞
hree heads permit sound-on-sound, monitoring.
hreading, automatic stop, dual level meters, digital
er, tape/source monitor. Single-knob function con-
nputs for 2 mike, 2 aux.; outputs: 2 line, stereo
nones. 30-21,000 Hz. With wood case, dust cover,
eup reel, reel holders, splicing tape, patch cords.
½x7¾". 117 VAC. Japan.
494 U. Shpg. wt., 23 lbs. **179.95**

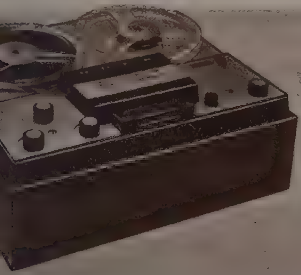
BELL & HOWELL

3-head Stereo Tape Deck

199^{95}

$10 monthly*

Model 2433. Outstanding tape deck boasts 3-head design for direct monitoring, sound-with-sound and echo effects. Records and plays 4-track stereo or mono through your music system or console at 7½, 3¾ and 1⅞ ips. Has two lighted level meters, two recording confidence lights on head cover; exclusive Audio-Eye indicates mode of operation, 7½ ips: 30-20,000 Hz; Flutter/Wow, 0.10%. Modern, space-age styling. With case, 7" takeup reel, patch cords. 11¾x15½x6¾". 117 VAC.
15 A 7024 U. Shpg. wt., 30 lbs. **199.95**



UHER

Top-quality Stereo Deck with 3 heads

199^{95}

$10 monthly*

7300D. Deluxe stereo tape deck boasts features and
y that rivals more costly units. Has 3 heads for direct
monitoring; sound-on-sound. Easy-to-operate key-
-type pushbutton controls; two level meters; digital
er. Records and plays 4-track stereo or mono at 7½
ips through your system or console. Positive track
on for mono recording. Automatic shutoff with
ic leader. 7½ ips: 40-18,000 Hz; Flutter/Wow, .08%.
t case. 7x15x14". 117 VAC. Imported.
514 U. Shpg. wt., 23 lbs. **199.95**

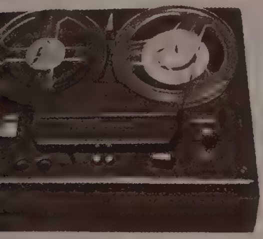
PANASONIC

Automatic reversing Stereo Deck

199^{95}

$10 monthly*

Model RS-796US. Conveniently plays an entire tape without the bother of reel turnover or rethreading. Automatic reversing stereo tape deck *records* and plays 4-track stereo and mono in both directions. Plays through your music system or console at 7½, 3¾ or 1⅞ ips. Deluxe dual-capstan drive. Dual record level meters, digital counter. Positive solenoid operation. 7½ ips: 40-15,000 Hz; Flutter/Wow, under 0.25%; S/N, over 50 dB. Wood case. 14x19½x7¾". 117 VAC. From Japan.
15 A 7465 U. Shpg. wt., 38 lbs. **199.95**



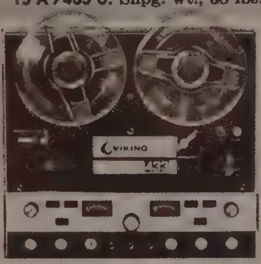
TANDBERG

Precision-made Stereo Tape Deck

249^{95}

$13 monthly*

1600X. Precision-crafted to meet the exacting
rds of the serious recordist. Records and plays
k stereo or mono at 7½, 3¾ or 1⅞ ips. through
ystem or console. Two level meters illuminate for
mode indication. Digital counter, automatic shut-
onvenient tape motion lever for instant stop and
7½ ips: 40-20,000 Hz; Flutter/Wow, less than
S/N, 55 dB. With wood base. 6¾x11¾x15½".
17 VAC. Imported.
654 U. Shpg. wt., 23 lbs **249.95**



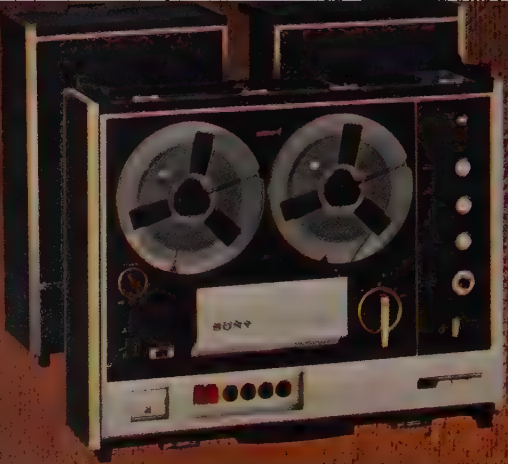
VIKING

Professional-quality 3-head Stereo Deck

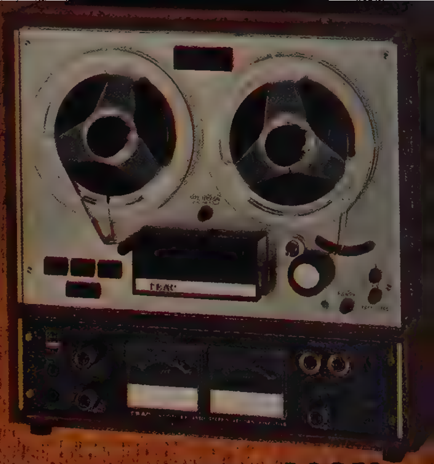
374^{95} less case

$18 monthly*

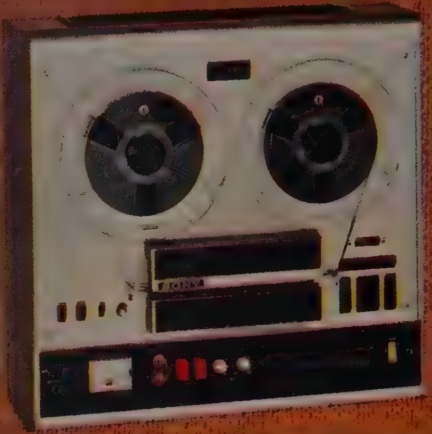
Model 433. Magnificent silicon-solid-state deck has 3 heads to permit tape monitoring, plus switch controlled echo and sound-on-sound. Three motors, digital counter, pause control, level meters. *Total* shut-off at end of tape. Plays through system or console at 7½, 3¾ or 1⅞ ips. Records 4-track stereo or mono. 7½ ips: 40-18,000 Hz; Flutter/Wow, under 0.2%. 14⅜x15¾x8¾". 117 VAC. Takes case below.
15 A 7448 U. Shpg. wt., 30 lbs. **374.95**
15 A 7449 X. Wood Case. Shpg. wt., 4 lbs. **29.50**



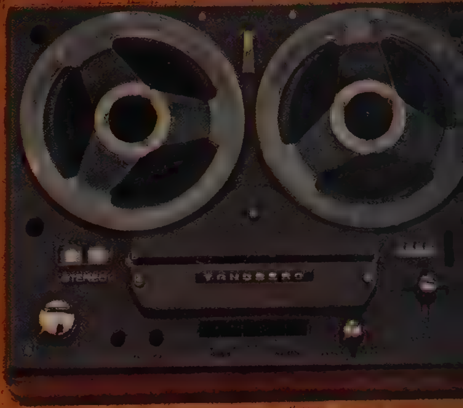
A Sony reversing Stereo Tape System 399^{50}



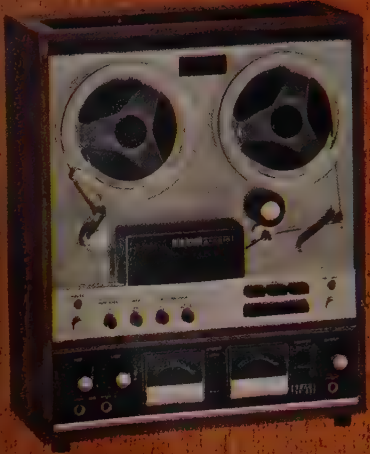
B Teac 3-motor reversing Stereo Tape Deck 469^{50}



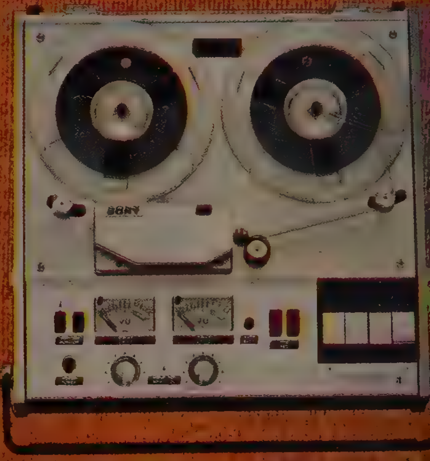
C Sony 3-motor reversing Stereo Tape Deck 489^{50}


STEREO
TANDBERG

D Tandberg four-head Stereo Tape Deck 549^{00}



E Teac 3-motor reversing Stereo Tape Deck 664^{50}



F Sony studio quality Stereo Tape Deck 750^{00}

/Superscope automatic-reversing Stereo Deck

l 560D. (Not illus.) Four-track stereo/mono record and
in both directions—E.S.P. reverses reels without sensing
Dual capstan drive, retracting pinch roller. Solid-state.
control motor. Level meters, counter, 7½, 3¾, 1⅞ ips.
,000 Hz at 7½ ips. 15½x16x6½". Walnut case, 7"
p reel. 117 VAC. Japan.
7049 U. Shpg. wt., 29 lbs. **299.50**

odel 560 ESP Automatic Reverse Stereo Tape System. Built-
20-watt stereo amplifier has control center with tuner
phono inputs. Two speaker systems. 17½x20⅜x11".
. *Full specifications on page 131.*
7304 Z. Shpg. wt., 53 lbs. **399.50**

Teac automatic-reversing Stereo Tape Deck

l A-4010 S. Separate record and play solid-state preamps.
rd, play, erase heads in one direction, play head for reverse
Tape monitoring, sound-on-sound. Hysteresis-synchro-
capstan motor, two reel motors. Electrically-switched
nd 3¾ ips speeds. Tape tension switch, 3½" VU meters,
l counter, automatic shutoff. Stereo headphone jack.
onse, 30-20,000 Hz at 7½ ips. Wow/flutter, 0.12% at 7½
Valnut case, 17¼x17½x9¾". 117 V, 60 Hz AC. Japan.
7087 Z. Shpg. wt., 64 lbs. **469.50**

ny/Superscope deluxe automatic-reverse Deck

l 666D. Records and plays stereo or mono in both direc-
—E.S.P. feature reverses tape without any sensing tape
lses. Solid-state. Smooth solenoid controls. Hysteresis-
ronous capstan motor, 2 reel motors. Noise reduction
n. Scrape flutter filter. Record level meters, instant stop,
l counter. Stereo headphone jack with 2-position level
. Speeds: 7½, 3¾ ips. Response, 20-22,000 Hz at 7½
ertical or horizontal operation. With walnut case, 7"
p reel, dust cover. 16⅝x17$\frac{3}{16}$x8$\frac{1}{16}$". 117 VAC. Japan.
573 Z. Shpg. wt., 58 lbs. **489.50**

D Tandberg four-head Stereo Tape Deck

l 64X. Records, plays 4-track stereo and mono through
music system. Separate record, play, erase, bias heads.
head provides hi-fi response even at slower speeds. Tape
oring, sound-on-sound. Hysteresis synchronous drive
. Pause control, level "eyes," automatic shutoff. FM
plex filter. Response: 20-25,000 Hz at 7½ ips; 20-18,000
3¾ ips. Flutter/wow: 0.15% at 7½ ips. Speeds: 7½,
⅞ ips. 15⅜x11⅝x6⅝". With teak base, 7" takeup reel.
17 VAC. Imported.
650 Z. Shpg. wt., 23 lbs. **549.00**

eac deluxe automatic-reversing Stereo Deck

l A-6010. Separate silicon-transistor record and play pre-
Records in one direction; plays in either. Hysteresis-
ronous motor assures low wow and flutter, 0.08% at
ips. Independent mike and line inputs provide versatile
g facilities. Tape tension switch. Large 3½" VU meters,
l counter, automatic shutoff. Electrically switched speeds
and 3¾ ips. Four premium heads plus 100-kHz bias for
ree stereo FM recordings. Response: 30-20,000 Hz at 7½
ignal-to-noise ratio: 55 dB. Walnut case, 21x17½x8¼".
17 V, 60 Hz AC. From Japan.
453 Z. Shpg. wt., 70 lbs. **664.50**

ony/Superscope battery/AC Stereo Tape Deck

l 770-4. Professional-quality 7"-reel deck for on-location
udio use. Record, play and erase heads. Tape/source
or. Servocontrol 7½, 3¾, and 1⅞ ips. speeds, plus 5%
ting control. Switchable playback noise reduction system
ts an increase in signal-to-noise ratio from 58 dB to 64
100% increase in dynamic range. Switchable transient
ad limiter. Front-panel bias and equalization adjust-
. Mike and line mixing. Scrape/flutter filter, tape lifters,
type VU meters, digital counter. Stereo headphone jack.
on XLR mike inputs. Built-in rechargeable nickel cad-
battery. Response, 20-22,000 Hz at 7½ ips. Wow/
, 0.09% at 7½ ips. 5¾x16⅛x15¼". Japan.
570 Z. Shpg. wt., 33 lbs. **750.00**

Deluxe Teac Stereo Tape Deck takes up to 10½-inch reels

Offers 15 ips speed for finest possible stereo high-fidelity sound

749^{50}

$31 monthly*

Model A-7030. Achieves highest standards of frequency response, wow and flutter, speed accuracy and signal-to-noise ratio. Two-track stereo record, play and erase heads, plus four-track play head. Three-stage direct coupled silicon transistor preamplifier offers excellent sound quality with minimum distortion. Response of ±2 dB, 30-20,000 Hz at 15 inches per second.

Hysteresis-synchronous capstan motor and two eddy current reel motors for accurate speeds and stable tape travel. Front-panel control to switch from two-track to four-track play. Reel pushbutton for selecting proper tension when using different reel sizes. Pushbutton for cuing during fast forward and rewind. Two large VU meters permit recording levels to be easily read for achieving stereo balance.

Four-digit tape counter. Automatic shutoff on completion of tape travel. Stereo headphone jack. 23x19x9". With walnut case, 10½" takeup reel. For 117 V, 60 Hz AC. From Japan.
15 A 7454 Z. Shpg. wt., 74 lbs. **749.50**

SPECIFICATIONS

Speeds: 15 and 7½ ips. *Response:* ±2 dB, 30-20,000 Hz @ 15 ips; ±2 dB, 45-15,000 Hz @ 7½ ips. *Wow/flutter:* 0.06% @ 15 ips; 0.08% @ 7½ ips. *Signal-noise:* −55 dB. *Bias:* 100 kHz. *Rewind and F. fwd.:* 1200 ft. in 120 sec. *Inputs:* Mic—10,000 ohms, 0.5 V minimum; line—300,000 ohms, 0.1 V minimum. *Output:* 1 V for impedance of 1000 ohms minimum.

STEREO
SOLID STATE
Allied

Allied® solid-state Stereo Tape Recorders

"The Allied TD-1080 is one of the more versatile and easy to use tape recorders in its price class. One would have to spend hundreds of dollars more to get better performance." .....STEREO REVIEW, APRIL 1969

Allieds Stereo Tape Recorders give you more for your mon

Allied silicon-transistor
-speed Stereo Tape Recorder

9^{95}

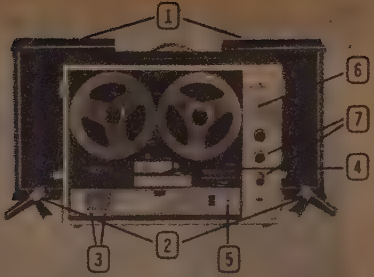
nthly*

Fine features like 3-speed capstan drive, powerful split-capacitor motor, automatic tape lifters and shutoff assure quality recordings and trouble-free operation

TR-1040. Convenient features, first-rate performance and
tered styling—this Allied three-speed solid-state stereo
ecorder has them all at a pleasantly low price. You even get
able speaker systems that separate up to 18-ft. for a "wall"
eo sound. Records and plays back four-track stereo or mono-
tapes at 7½, 3¾ or 1⅞ ips. Powerful capacitor-start motor
capstan for imperceptible flutter and wow of less than
at 7½ ips. Convenient single-lever function control pro-
nstant and positive control of the tape transport.

l from radio, phono or "live" with the included micro-
. Preamp outputs allow you to use this recorder as a tape
or record or playback through your home stereo system.
-transistor circuit assures fine wide-range sound and
operating life. Built-in stereo amplifier delivers ample
to drive the detachable speaker systems which form the
er cover when the case is closed. Also has 2 level meters,
o-reset digital counter, automatic tape lifters during fast
d and rewind to protect heads, automatic end-of-reel
, separate volume and tone controls for each channel, and
headphone jack with its own level control.

: two microphone and two auxiliary. Outputs: two preamp,
xtension speakers and stereo headphones. Response: 40-
Hz. Signal-to-Noise Ratio: 50 dB. With 7" takeup reel,
nidirectional dynamic microphones, and patch cords. Black
overed case. Size, 13⅝x18½x9⅞". For 110-120 volts, 60
. From Japan.
104 U. Shpg. wt., 34 lbs. 179.95



1 **Detachable wide-range speaker systems assure full stereo realism, and cover the carrying case when recorder is used as a portable**

2 **Omnidirectional dynamic microphones permit full-response recordings every time**

3 **Accurate meters indicate recording levels for highest signal levels without distortion**

4 **Precision capstan drive for flutter and wow that is virtually imperceptible**

5 **Front panel mounted stereo headphone jack has its own level control and permits enjoyment of beautiful stereo music in privacy**

6 **Built-in stereo amplifier has silicon circuit for longer life and cleaner sound**

7 **Separate volume and tone controls allow adjustment of sound to suit individual taste and program material**

Allied automatic-reversing
d-state Stereo Tape Recorder

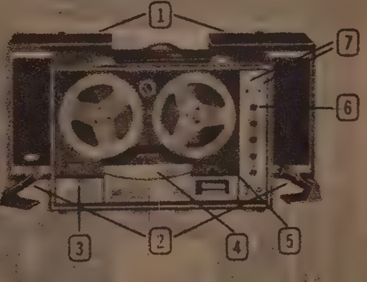
9^{95}

onthly*

You simply can't buy an easier to use 7-inch reel tape recorder . . and it includes sound-with-sound, plus sound-on-sound recording facilities for special effects

TR-1080. Never reverse tape reels again. Let our finest
solid-state stereo recorder do the work for you with its
atic-reversing feature! Recorder can be set for one complete
nd shutoff, continuous replay or automatic stop at a pre-
ined point. Records and plays back 4-track stereo or mono-
tapes at 7½, 3¾ or 1⅞ ips. Four heads permit sound-
ound and sound-on-sound. Preamp outputs let you use this
as a deck with your home stereo system. Pause control and
indexing counter simplify tape editing.

switches control solenoid-operated transport. Automatic
fters, two level meters, separate volume and tone controls
h channel, speakers on/off switch and stereo headphone
Oversize capacitor-start motor keeps flutter and wow under
at 7½ ips. Response: 40-19,000 Hz at 7½ ips. Inputs: two
nd auxiliary. Outputs: two preamp and extension speakers,
ones. Vinyl-covered case. 12¾x19⅛x12¼". With 7" takeup
mikes, patch cords, sensing tape. 117 VAC. Japan.
579 U. Shpg. wt., 45 lbs. 299.95



1 **Detachable speaker systems form the cover of the recorder and separate for stereo sound with full channel separation and realism**

2 **Premium-quality omnidirectional microphones permit full-fidelity recordings**

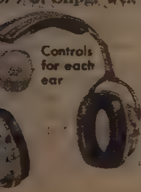
3 **Separate record pushbuttons and microphone inputs are neatly concealed behind front panel fold-down door**

4 **Four professional-quality heads permit record and playback in either direction; also have internal switching circuit for recording sound-on-sound**

5 **Easy-to-operate solenoids for safe, effortless operation of the tape transport**

6 **Built-in stereo amplifier has silicon circuit for utmost reliability and finest sound**

7 **Two large level meters allow easy, instant monitoring of recording volume**



Allied TR-1080 with Headphone Bonus for only $10 more

Separately, $339.90. Save $29.95. Includes TR-1080 automatic reversing recorder with Allied H886 Stereo Headphones, 16′ cord and ¼" plug.
15 A 0177 L2U, Wt., 47 lbs. 309.95

page 438 for full Credit details

Choose from big selection of popular priced

149^{95} **$8 monthly** *see page 438*

Allied Stereo Recorder offers versatility at a low price

Equipped for use as a deck or as a portable . . Includes two built-in speakers plus two microphones

Model TR-1035. You can use this recorder to build up your own tape library by using the mikes included, or record from any radio or phono, or play pre-recorded tapes. Solid-state stereo amplifier delivers ample power to two wide-range speakers. Easy-to-use single-knob function control with instant stop.

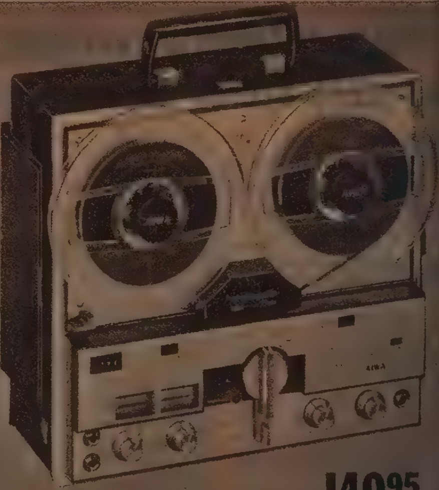
Volume controls for each channel; tone control. Tape lifters prevent head wear during rewind. Two large recording level meters. Automatic shutoff at end of reel. Front-panel stereo headphone jack. Speaker on-off switch. Can be used as a stereo tape deck with your music system for even greater fidelity.

Speeds: 7½, 3¾, 1⅞ ips. Inputs: 2 mike, 2 aux. Outputs: Preamp, 2 extension speakers, headphone. Response: 40-15,000 Hz at 7½ ips. Flutter/wow: under 0.15% at 7½ ips. Vinyl-covered case, 12½x15¾x7⅜". With 7" takeup reel, two mikes and patch cords. For 110-120 volts, 60 Hz AC. From Japan.
15 A 7577 U. Shpg. wt., 32 lbs. 149.95

179^{95}

Roberts Stereo Tape Recorder

Model 1719. Compact solid-state recorder has two built-in speakers. Records and plays 4-track stereo or mono at 3¾ and 7½ ips. Volume and tone controls for each channel. Digital counter; twin level meters. Sound-with-sound. Automatic shutoff. Source monitoring. 20 watts peak total. Response, 40-15,000 Hz at 7½ ips. Flutter and wow: 0.25% at 7½ ips. Inputs: 2 mike, 2 radio/phono. Outputs: equalized preamp, external speakers, stereo headphone. Size, 15⅛x14⅝x9". With one mike, 7" takeup reel. From Japan. For 115 volts, 60 Hz AC.
15 A 7384 U. Shpg. wt., 25 lbs. 179.95


149^{95}

Aiwa battery/AC Stereo Tape Recorder

Model TP-1012. Records and plays full-range four-tr stereo or mono tapes anywhere—home, car, beach, o ings. Two built-in speakers. Level meters, digital count pause control. Output: 5 watts peak. Speeds: 7½, 3¾, ips. Response: 50-16,000 Hz at 7½ ips. 7" reel capac Inputs: 2 mike, 2 radio/phono/TV. Outputs: exter speakers, stereo headphones. Compartment for two mi and AC line cord. With 2 mikes, 5" reel of tape, take reel, 8 "D" batteries, and AC cord. Size, 13½x12 7¼". From Japan.
15 A 7151 U. Shpg wt., 17 lbs. 149

SHIPPING NOTE: Items with suffix U, W or Z in stock no. sent or express. See Ordering Information pa

lid-state hi-fi Stereo Tape Recorders

PANASONIC Stereo Recorder featuring trans-a-track

159^{95}

$8 monthly*

RS-760S. Records and plays 4-track stereo and mono
3¾ and 1⅞ ips. Trans-a-Track feature for language
and special effects. Two level meters, pause control,
monitoring, automatic shutoff. Two built-in speak-
-17,000 Hz at 7½ ips. Flutter/wow: 0.25% at 7½ ips.
: 2 mike, 2 radio/phono. Outputs: preamps, external
r, stereo headphone. With 2 mikes, 7" reel tape, take-
, cord. 14x13½x7". 115 V, 60 Hz AC. Japan.
224 U. Shpg. wt., 22 lbs. 159.95

ROBERTS Recorder with detachable speakers

199^{95}

$10 monthly*

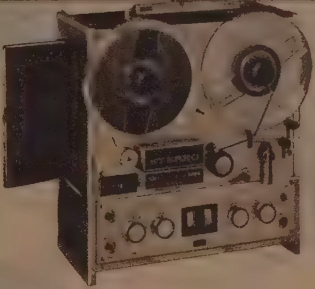
Model 1720. Feature-packed recorder has speakers that separate for maximum stereo effect. Records and plays 4-track stereo and mono at 7½ and 3¾ ips. Head demagnetizer, pause lever, counter, level meters, automatic shutoff. Inputs: 2 mike, 2 radio/phono. Outputs: preamp, external speakers, stereo headphone. 40-15,000 Hz at 7½ ips. Wow/flutter, less than 0.25% at 7½ ips. Vinyl covered case. 15⅛x14⅝x10½". 2 mikes, 7" takeup reel. 115 VAC.
15 A 7113 U. Japan. Shpg. wt., 26 lbs. 199.95

WOLLENSAK Recorder with compression speakers

199^{95}

$10 monthly*

del 6200. Features built-in compression speakers, two
tors and open-front threading. Records and plays
reo and mono at 7½, 3¾ and 1⅞ ips. Tone control,
use control, automatic shutoff, level meters, stereo
dphone jack. Electro-dynamic braking. Peak power
tput: 16 watts. 40-20,000 Hz at 7½ ips. Flutter and
w: 0.15% at 7½ ips. Inputs: 2 mike, 2 radio/phono.
th two dynamic mikes, 7" reel of tape, takeup reel.
e, 13x16x5". For 115 volts, 60 Hz AC.
A 7581 U. Shpg. wt., 32 lbs. 199.95



AIWA 3-speed Stereo Recorder

179^{95}

$9 monthly*

Model TP-1001W. Deluxe features for excellent performance. Records and plays 4-track stereo and mono at 7½, 3¾ and 1⅞ ips. Hysteresis-synchronous motor, tone controls for each channel, level meters, four-digit counter, pause control. 4x8" built-in speakers. Inputs: 2 mike, 2 radio/phono. Outputs: external speakers, stereo headphone. 70-15,000 Hz at 7½ ips. Flutter/wow: 0.15% at 7½ ips. 14½x13½x10". Two mikes, 7" reel tape, takeup reel, cord. 115 V, 60 Hz AC. Japan.
15 A 7289 U. Shpg. wt., 27 lbs. 179.95

SONY/SUPERSCOPE Recorder 199^{50}

252. Two full-range lid-integrated speakers provide
ful sound. Records and plays 4-track stereo and
at 7½, 3¾ and 1⅞ ips. Non-magnetizing record
pause control, retracting pinch roller, automatic tape
scrape flutter filter, sound-with-sound, speaker
or switch, PA facility. Inputs: 2 mike, 2 aux. Outputs:
ps, stereo headphone. 30-18,000 Hz at 7½ ips. 10⅛x
. 115 VAC. Two mikes. Japan.
555 U. Shpg. wt., 30 lbs. 199.50

PANASONIC Stereo Recorder with detachable speakers 199^{95}

Model RS-761S. Features two two-way speaker systems that separate for impressive stereo. Records and plays 4-track stereo at 7½, 3¾ and 1⅞ ips. Pause control, four-digit counter, two large level meters, automatic shutoff. Inputs: 2 mike, 2 aux. Outputs: preamp, stereo headphone. Response, 30-18,000 Hz at 7½ ips. Walnut cabinets. 11¼x17 5/16x6½". With 2 mikes, 7" reel of tape, takeup reel, splicing tape, reel holders. 115 VAC. Japan.
15 A 7140 U. Shpg. wt., 30 lbs. 199.95

Solid-state 7"-reel Stereo Tape Recorde

229^{95}
$12 monthly*

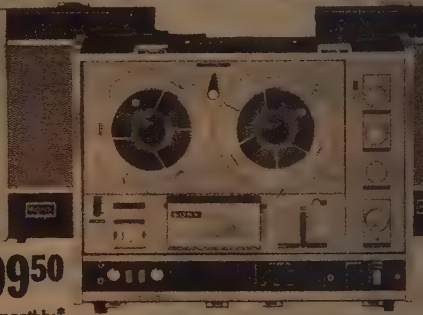
Wollensak Stereo Tape Recorder

- Compression-loaded speakers for good bo
- Two motors with electro-dynamic braking
- Automatic shutoff • Pause control for editin

Model 6300. Records and plays stereo and mono a
3¾ and 1⅞ ips. Solid-state. Delivers 16 watts
power to detachable speaker systems. Two m
and electro-dynamic brakes. Open-front thre
Tone control, pause control, automatic shutoff,
counter, level meters. Stereo headphone jack. Di
aluminum chassis. Frequency response, 40-20,000
7½ ips. Flutter and wow, 0.15% at 7½ ips. Wit
mikes, 7" reel of tape, takeup reel. 14½x16½x
For 115 VAC. Shpg. wt., 35 lbs.
15 A 7580 U. . . . .

B

279^{95}
$14 monthly*



299^{50}
$15 monthly*

Wing speakers optional

C

349^{95}
$17 monthly*

D

369^{00}
$17 monthly*

A Sony/Superscope quadradial-sound Stereo Re

Model 540. Four-track stereo and mono recorde
tures high frequency XL-4 20-watt sound sy
Speakers built into lids. Sound-with-sound, bas
treble controls, noise suppressor switch, retr
pinch rollers, shutoff. 7½, 3¾, 1⅞ ips. 30-20,0
at 7½ ips. Flutter/wow, 0.09% at 7½ ips. 10
15½". Two mikes, 7" reel. 115 VAC. Japan.
15 A 7240 U. Shpg. wt., 42 lbs. . . . .

B Panasonic automatic-reversing Stereo Reco

Model RS-790S. Records and plays in both direc
Dual capstan drive. Pause control, level meters
controls, sound monitor, shutoff. *Built-in speaker*
3¾, 1⅞ ips. 30-20,000 Hz at 7½ ips. 17x16½x9"
mikes, 7" tape, takeup reel, sensing tape, reel ho
Optional wing speakers below. 115 VAC. Japan.
15 A 7163 U. Shpg. wt., 51 lbs. . . . .
15 A 7164 X. Detachable Speakers. 40 lbs. . . **Pair**

C Ampex three-head Stereo Recorder

Model 767. Three separate deep-gap heads permi
monitoring, sound-on-sound, echo. Hysteresis sy
nous motor. Dual capstan drive. Bass, treble co
pause control, sound-with-sound. Walnut acc
suspension speakers. Automatic shutoff, auto
tape lifters. 7½, 3¾, 1⅞ ips. 20-20,000 Hz at 7
Flutter/wow, 0.08% at 7½ ips. 14x23½x8½".
two mikes. 115 VAC.
15 A 7386 Z. Shpg. wt., 55 lbs. . . . .

D Ampex automatic-reversing Stereo Recor

Model 1161. Recorder threads itself automaticall
plays complete 4-track stereo tape, automatical
versing. Slide-on speaker enclosures separate t
Deep-gap heads, VU meters, digital counter, m
Automatic shutoff or replay. 7½, 3¾, 1⅞ ips. 20-
Hz at 7½ ips. Flutter/wow, 0.10% at 7½ ips. 13
7½". With 2 mikes. 115 VAC.
15 A 7264 U. Shpg. wt., 48 lbs. . . . .

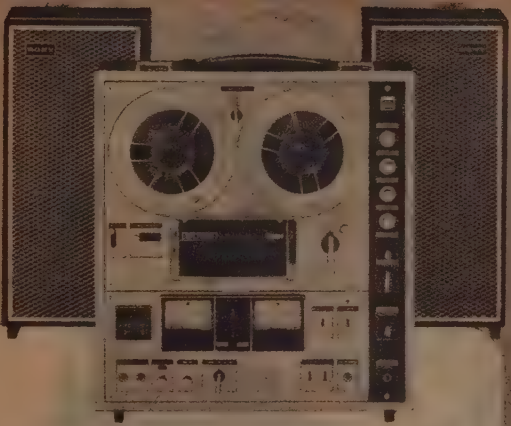
ith separate speaker systems for finer stereo

/Superscope 3-head Stereo Tape Recorder

witching for sound-on-sound
ape and source monitor
nique scrape flutter filter

379⁵⁰
$18 monthly*

630. Separate record, play, erase heads permit
monitoring, sound-on-sound, echo. Non-magnetiz-
ecord head. Scrape flutter filter, noise suppressor.
cting pinch roller. Counter, bass and treble con-
pause control. Built-in, lid-integrated speakers
r 40 watts total music power. PA feature. Two
headphone jacks. 7½, 3¾, 1⅞ ips. Response,
,000 Hz at 7½ ips. Flutter/wow, 0.09% at 7½ ips.
⅞x11⅝". With two mikes, 7" takeup reel. 117
Japan.
7585 U. Shpg. wt., 46½ lbs. 379.50



(A)
399⁹⁵
$18 monthly*

(B)
399⁵⁰
$18 monthly*

(C)
449⁹⁵
$20 monthly*

(D)
499⁹⁵
$21 monthly*

Roberts reel/8-track-cartridge Stereo Recorder

778X. Records and plays 4-track stereo or mono
o-reel tape, *plus* 8-track stereo tape cartridges.
rd your own cartridges for car stereo tape players.
-Field head for reels. Counter. Response: Reel, 30-
0 Hz; cartridge, 50-15,000 Hz. 7½, 3¾, 1⅞ ips;
s for cart. Built-in speakers with sound deflectors.
½x9½". Less mikes. 115 VAC. Japan.
7499 Z. Shpg. wt., 50 lbs. 399.95

y/Superscope ESP automatic-reversing Recorder

560. Features inputs for tuner and phono—forms
basis of a 20-watt stereo system. Two speaker
ns in lid separate up to 15 feet. Servo-control
, dual capstan drive, Non-magnetizing heads.
e, flutter filter. Retracting pinch roller, noise sup-
or switch, digital counter, level meters. 7½, 3¾,
s. With 2 mikes, 7" reel. 17½x20⅜x11". Japan.
7304 Z. Shpg. wt., 53 lbs. 399.50

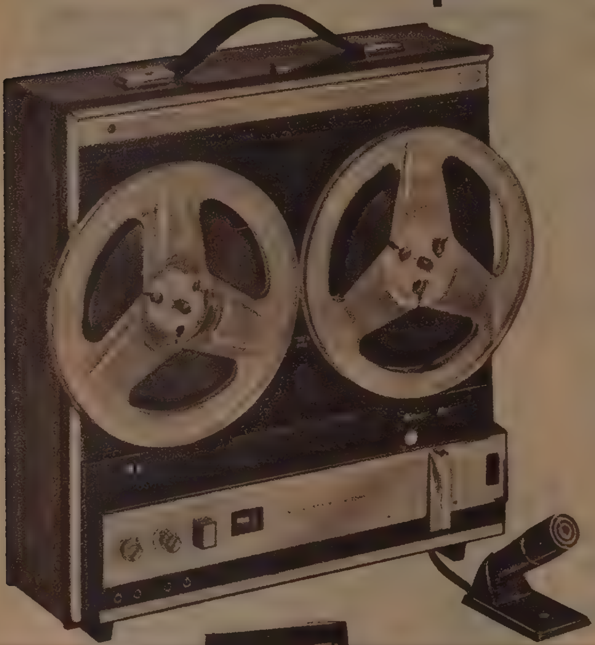
Ampex automatic-reversing Stereo Recorder

1467. Reverses automatically at end of tape.
matic threading. Four deep-gap heads. Direct
monitoring, sound-on-sound, echo. Hysteresis
ronous motor. Dual capstan drive. Walnut
tic-suspension speakers. Automatic shutoff, auto-
tape lifters. 7½, 3¾, 1⅞ ips. 20-20,000 Hz at 7½
Flutter/wow, 0.08% at 7½ ips. 14x23½x8½".
two mikes. 115 VAC.
7385 Z. Shpg. wt., 55 lbs. 449.95

Ampex automatic-reversing Stereo Recorder

2161. Records and plays 4-track stereo or mono
th directions. Automatic threading. Dual capstan
for perfect tape tension. Professional quality
gap heads. Monophonic mixer for mixing two
es on one track. 9x6" wing speakers separate for
, close to form cover. 20-22,000 Hz at 7½ ips.
er/wow, 0.07% at 7½ ips. Also has 3¾, 1⅞ ips
s. 13¾x18⅝x7". With 2 mikes. 115 VAC.
7260 Z. Shpg. wt., 55 lbs. 499.95

Portable monophonic Tape Recorders wit



Allied® Portable has automatic level control for professional recordings

79⁹⁵ *Digital counter makes editing ar locating selections on tape easy*

Model 1050. Solid-state recorder is loaded w extras for outstanding monophonic tape record and playback. Luxurious styling with unclutte design for handsome appearance and conveni vertical operation. Compact for easy portabil yet takes up to a full-size 7" reel. Records and pl two-track mono at 7½ and 3¾ ips.

Response of 50-12,000 Hz for fine music reprod tion. Amplifier delivers two watts peak power o put to built-in 4x6" wide-range speaker. Tone c trol lets you adjust response. Line output all use as a deck to play through your music syst

Record directly from any radio or phono, or mike for live recordings. Automatic level con maintains constant level, prevents distortion; be switched off for music recording. Accurate cording level meter. High or low level spea monitor switch. Push-to-reset digital counter ma it easy to locate selections on a tape. Pause/ forward control lets you edit tapes as-you-go.

External speaker jack. Reel locks. Accessory co partment on rear for storing AC cord and m Carrying strap. Transparent dust cover. 13 13⅛x7⅜". With mike, 5" reel of tape, 5" tak reel, splicing tape, patch cord. 115 VAC. Jap
15 A 7575 U. Shpg. wt., 18 lbs. 79

PANASONIC

3-speed Recorder may be used as PA system

99⁹⁵ *Choice of automatic or manual level control for distortion-free recording*

Model RQ-706S. Moderately-priced monophonic tape recorder boasts many expensive-recorder features. Has choice of automatic or manual level control for distortion-free recording every time. Sound monitoring selector permits recorder's use as a public address system. Records and plays two-track mono at 1⅞, 3¾ and 7½ ips. Solid-state circuit assures dependability. Provides beautiful reproduction of voice or music from 50 to 15,000 Hz at 7½ ips. Two quality dual-cone speakers. Tone control lets you adjust response to suit your own preference. Level meter, pause control, tape counter. 12x14x6¾". With mike, stand, 7" takeup reel. 115 VAC. Japan.
15 A 7259 X. Shpg. wt., 19 lbs. 99.95

WOLLENSAK
3m

WOLLENSAK

Deluxe Recorder for true hi-fi performance

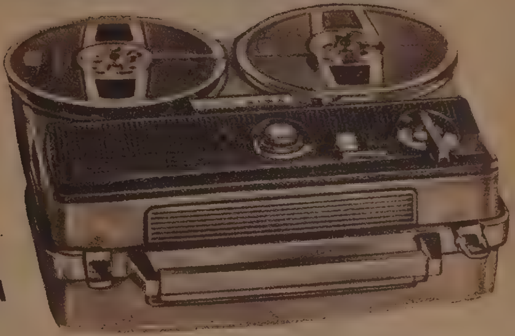
184⁹⁵ *Designed to satisfy the requirements o professional and educational applicatio*

Model 1500SS. Features simple keyboard operation t puts all controls right at your fingertips. Accurate le meter indicates recording level for quality recordin Special provision permits monitoring and use as system. Powerful 10-watt push-pull solid-state amplif Has tone control, digital counter, tape lifters. Sturdy metal construction will take plenty of wear-and-tear provide years of dependable service. Plays mono at and 3¾ ips. Response, 40-15,000 Hz at 7½ ips. Inpu mike/phono-radio. Outputs: extension speaker, prea Size, 6½x10¼x11¾". With dynamic mike, 7" takeup r reel of tape. For 115 VAC.
15 A 7339 U. Shpg. wt., 20 lbs. 184

SHIPPING NOTE: Items with suffix U, W or Z in stock no. sent t or express. See Ordering Information pa

in. reel capacity and solid-state circuits

AIWA



119⁹⁵ Battery/AC 3-speed portable with automatic level control

l TP-719. Full 7" reel capacity in a compact portable
deluxe, lockable attache case. Operates on batteries,
DC or 115 VAC. Features automatic recording level
rol for distortion-free 2-track mono recordings. Push-
on function control for fast-forward, rewind and play-
. Three capstan-controlled speeds: $1\frac{7}{8}$, $3\frac{3}{4}$, $7\frac{1}{2}$ ips.
l meter, digital counter, tone control, 5" oval speaker;
t for recording from radio-TV. $3\frac{5}{8}$x$16\frac{1}{2}$x13". With
te-control start/stop mike, 7" takeup reel, 4 batteries.
DC car adapter. Japan.
7271 U. Shpg. wt., 17 lbs. **119.95**

89⁹⁵ 2-speed portable Recorder in handsome attache-style case

Model TP-802. Features solid-state circuit with frequency response of 70-15,000 Hz for excellent clarity. Plays mono through built-in 6" speaker or earphone. Outputs for playback through hi-fi system or external speaker. Full 7" reel capacity permits recording lengthy radio broadcasts on a single tape. Has recording level meter, digital counter, pushbutton fast forward, and tone control. $3\frac{3}{4}$, $7\frac{1}{2}$ ips. Vinyl-coated steel attache case. 6x14x14". With remote-control start/stop mike, earphone, 7" takeup reel, reel of tape, patch cords. 115 VAC. Japan.
15 A 7258 X. Shpg. wt., 18 lbs. **89.95**

ony/Superscope portable Recorder

l 104-A. Solid-state tape recorder automatical-
ljusts recording level, or lets you adjust it
ally using level meter. Also has instant one-
ed tape threading; automatic sentinel shut-
amplifier that doubles for PA; pause control;
l counter; automatic tape lifter; two-track
s. Plays mono at $1\frac{7}{8}$, $3\frac{3}{4}$ and $7\frac{1}{2}$ ips. Re-
e, 40-18,000 Hz at $7\frac{1}{2}$ ips. 6x4" speaker; low-
igh-impedance inputs; outputs for monitor and
er. $6\frac{1}{2}$x16x$10\frac{3}{4}$". With mike, earphone, 7"
p reel. For 115 VAC. From Japan.
7253 U. Shpg. wt., 16 lbs. **112.50**

Automatic level control assures fine recordings

112⁵⁰

$6 monthly*

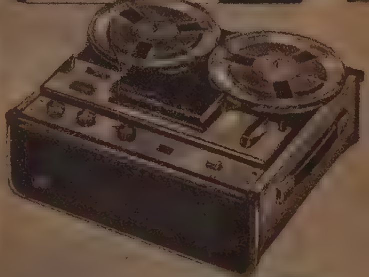
ny/Superscope four-track Recorder

l 105. Quality monophonic tape recorder fea-
four tracks for double recording time. Auto-
level control prevents fading or blasting.
retractable pinch rollers for easy threading.
control lets you adjust response. Level meter
accurate indication of recording level for
ty recordings. Separate record/play level con-
automatic shutoff; instant stop; AVC defeat.
e speeds: $1\frac{7}{8}$, $3\frac{3}{4}$ and $7\frac{1}{2}$ ips. Response, 40-
0 Hz at $7\frac{1}{2}$ ips. 6x14x8". With mike, earphone,
keup reel. 115 VAC. Japan.
7287 U. Shpg. wt., 12 lbs. **139.50**

Four tracks provide double recording time

139⁵⁰

$7 monthly*



llensak quality pushbutton Recorder

l 5710. Fine quality solid-state monophonic
recorder is packed with superb engineering
res. Has power-activated pushbutton control
r for easy fingertip operation. Other deluxe
res: built-in tape head demagnetization; full
monitoring facilities; level meter; two-track
s; tape lifter; reel locks; 6x4" speaker. Digital
er and pause control. Operates vertically or
ontally. $1\frac{7}{8}$, $3\frac{3}{4}$ and $7\frac{1}{2}$ ips. Response, 40-
0 Hz at $7\frac{1}{2}$ ips. 10x16x7". With mike, 7"
p reel, reel of tape. 115 VAC.
7041 U. Shpg. wt., 23 lbs. **159.95**

Pause control, digital counter for easy editing

159⁹⁵

$8 monthly*

5"-reel battery/AC portable Tape Recorders

Allied® Recorder with automatic level control

49^{95}

$5 monthly*

- ALC prevents overload distortion
- 3x6" speaker delivers good sound
- Push-to-reset three-digit counter

Model 1055. Solid-state portable is an excellent value. Ideal
home, school, business, music at parties, dictation, TV c
lege courses. Records and plays two-track mono at 3¾ a
1⅞ ips. Keyboard-type pushbutton controls. Switcha
automatic level control prevents overload distortion. Bu
in 3x6" speaker for wide-response sound and good music
production. Tone control. Speaker monitor lets you h
sound source when recording. Counter, level/battery met
Inputs: mike and aux. Output: extension speaker/headpho
11-4/5x9½x3½". With remote start-stop dynamic mike,
"D" batteries, AC cord, patch cord, 5" reel of tape, 5" take
reel. From Japan. Shpg. wt., 9 lbs.
15 A 0016 X..49.

AIWA

69^{95}

$5 monthly*

Ⓐ

AIWA

79^{95}

$5 monthly*

Ⓑ

Ⓒ

WOLLENSAK

89^{95}

$5 monthly*

99^{95}

$5 monthly*

Ⓓ

PANASONIC

Ⓐ Recorder with ALC

Model TP-713. Solid-state mono recorder operates at 3¾ and 1⅞ ips. Features automatic level control to prevent fading and blastings on recordings. Pushbutton controls, recording level/battery condition meter, tone control, digital counter, 4x2¾" speaker. Inputs: mike, radio/TV/phono. Output: extension speaker/earphone. Size, 8x11⅞x12". With remote start/stop mike, earphone, 5" reel tape, takeup reel, 4 "D" batteries, AC cord. Japan. Shpg. wt., 10 lbs.
15 A 7274 U....................69.95

Ⓑ Lightweight Recorder

Model TP-537. Easy-to-carry t
recorder is perfect for ho
school or car. Great for part
indoors or outdoors. Records a
plays two-track mono at 3¾ a
1⅞ ips. Features constant sp
capstan drive, front-mounted
speaker, recording level/batt
strength meter. Inputs: mike a
aux. Outputs: extension spe
er/headphone. 11½x11x4
With remote start-stop mike,
reel tape, takeup reel, six "
batteries, AC cord. From Jap
Shpg. wt., 6 lbs.
15 A 7469 X....................79.

Ⓒ Deluxe Recorder with ALC

Model 3500. Quality compact battery/AC recorder. Operates at 3¾ and 1⅞ ips. Automatic level control prevents distortion from overloud sounds. Convenient pushbutton controls, recording level/battery condition meter, tone control, digital counter, speaker. Inputs: mike, aux. 4x11½x10¼". With remote stop/start mike, earphone, 5" reel tape, takeup reel, AC cord. Order 6 batteries below. Japan. 9 lbs.
15 A 7522 X....................89.95
18 A 5779. Batteries. Shpg. wt., 10 oz....................**Pkg. of 2 for 33¢**

Ⓓ 4-track mono Recorder

Model RQ-194S. Four-track m
heads for double recording ti
"Easy-Matic" automatic le
control prevents over-record
If AC fails, batteries take o
automatically. Sound-wi
sound. Record level/battery c
dition meter, digital coun
built-in speaker. Speeds: 3¾,
ips. Inputs: mike, radio/ph
Attache-style case, 4x14¾x
With remote stop/start m
earphone, 5" reel of tape, tak
reel, patch cord, AC cord,
batteries. Japan. Wt., 7 lb
15 A 7463 X....................9

*Buy with no money down . . See page 438 for full Credit det

Sony/Superscope 5" Battery/AC Recorders

Ⓐ 99^{50}
$5 monthly*

Ⓑ 129^{50}
$7 monthly*

Ⓐ Recorder with automatic level control

l 222A. Compact solid-state portable recorder records plays crystal-clear mono at 3¾ and 1⅞ ips. Single lever ion control. Switchable automatic level control prevents oad distortion. Record level/battery condition meter, ter. 5½x2½" speaker. 12x9x4". With remote stop-start , 5" takeup reel, batteries, AC cord. Japan.
7568 X. Shpg. wt., 12 lbs. 99.50

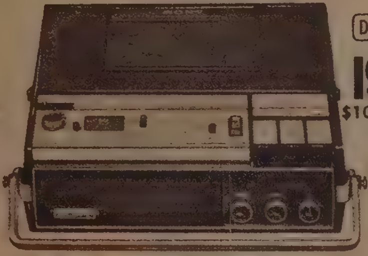
Recorder with "Servocontrol" speed control

l 860. "Servocontrol" electronically maintains precise ls. Electrically switchable 3¾ and 1⅞ ips speeds. Auto- level control for undistorted recordings. Tone control, ker monitor, PA facility, digital counter. Size, 4x12x10". F-85 remote stop-start cardioid dynamic mike, 5" takeup batteries, AC cord. Japan.
7552 U. Shpg. wt., 13 lbs. 129.50

Ⓒ 139^{50}
$7 monthly*

our-track model with "Servocontrol" and ALC

l 864. Four tracks for double mono recording time. matic level control, varispeed pitch control, automatic lifters, speaker monitor, PA facility, record indicator , tone control, counter. 3x6" speaker. 3¾, 1⅞ ips. 50- 0 Hz at 3¾ ips. 4x12x10". With remote stop-start mike, keup reel, batteries, AC cord. Japan.
7551 U. Shpg. wt., 13 lbs. 139.50



Ⓓ 199^{50}
$10 monthly*

-speed Recorder with "Servocontrol" and ALC

l 800-B. Built-in condenser mike with IC amplifier for sensitivity and directivity, plus remote cardioid mike. 3¾, 1⅞, $^{15}/_{16}$ ips. Vari-speed tuning, servo-control motor, /battery meter. Sonymatic record mode (voice or music) manual. Record interlock, tone control, monitoring. 4½x x10½". Batteries, 5" takeup reel, AC cord. Japan.
7586 U. Shpg. wt., 15 lbs. 199.50

Uher professional 4-speed battery/AC Recorder Outfit

Solid-state 2-track monophonic portable

Complete Outfit 299^{95} $15 monthly*

l 4000L-M514. Broadcast-quality portable re- er. Ideal for use by reporters, businessmen, ers, students or anyone who requires professional rmance. Calibrated VU meter. Quiet high-fre- y motor. Piano-key style controls. Operates in osition. Built-in belt cleaning brushes. Exceptional ency response of 40-22,000 Hz at 7½ ips, 40- 0 Hz at 3¾ ips, 40-10,000 Hz at 1⅞ ips, 40-4500 t $^{15}/_{16}$ ips. Wow/flutter, 0.15% at 7½ ips. 3½x9x Complete with remote mike, leather case, re- eable battery pack, and AC power supply/battery er. Imported.
7500 U. Shpg. wt., 9 lbs. 299.95

Leather case

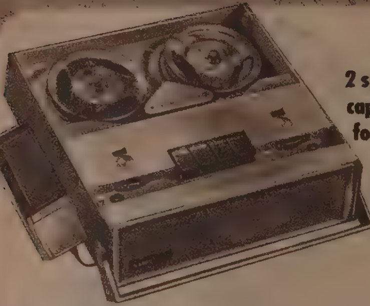
Rechargeable battery pack

AC supply and battery charger

Remote mike

With all items shown

Portable 3¼"-reel solid-state Tape Recorde



AIWA

2 speeds with capstan drive for accuracy

29⁹⁵

*$5 monthly**

Model TP-714. Compact portable records and plays at 3¾ and 1⅞ ips. Capstan drive maintains uniform tape speed. Has easy-to-use pushbutton controls, tone control, 6x2" oval speaker for clear sound. Extension speaker output jack. Auxiliary input jack. Only 2⅝x 9x9". With stop-start dynamic mike, 4 "C" batteries, reel of tape, takeup reel, earphone. From Japan.
15 A 7183 X. Shpg. wt., 7 lbs....................29.95

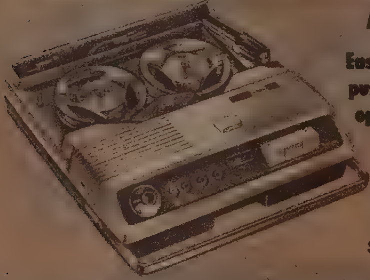
AIWA

Two-speed,
battery/AC
operation

34⁹

$5 monthl

Model TP-710. Easy-to-carry portable recorder makes
plays tapes anywhere. Uses 4 "D" batteries or 117 V
Automatic level control. 3" speaker delivers clear sou
3¾ and 1⅞ ips speeds. Sturdy case has mike sto
under molded handle. 2⅞x8¼x10¼". With start-s
mike, batteries, AC cord, reel of tape, takeup reel,
phone. From Japan.
15 A 7466 X. Shpg. wt., 7 lbs....................3



AIWA

Easy-to-use pushbutton operation

39⁹⁵

*$5 monthly**

Model TP-715. Easy-to-use portable recorder has pushbutton operation. Records and plays 2-track mono at 3¾ and 1⅞ ips; capstan drive keeps speed constant. Uses 4 "C" batteries. Has recording level/battery condition meter. 2½" speaker. Mike storage compartment in molded case. 3x9½x9½". With start-stop mike, batteries, reel of tape, takeup reel, earphone. From Japan.
15 A 7515 X. Shpg. wt., 7 lbs....................39.95

CRAIG

Has ALC for perfec
recordings every tim

34⁹⁵ $5 monthly

Include
117 VA
Adapte

Model 212. Popular recorder features automatic level
trol to prevent distortion. Operates at 3¾ or 1⅞ ips
"C" batteries or with 117 VAC adapter. "T" func
control. With stop-start mike, 3¼" reel of tape, tak
reel. 3⅛x7⅞x9¾". With AC adapter. Order batteries
low. From Japan.
15 A 0178 L2X. Shpg. wt., 6 lbs....................3
18 A 5078. "C" Batteries. Shpg. wt., 10 oz.....Pkg. of 2

AIWA

Pushbutton battery/AC portable

42⁹⁵

*$5 monthly**

Model TP-716. Versatile recorder is great for home, school or business. Operates on 4 "C" batteries or 117 VAC. Pushbutton operation with fast forward; record/battery meter; mike storage compartment. 3¾ and 1⅞ ips speeds, capstan drive. Tone control. 3x9½x9½". With batteries, AC cord, start-stop mike, reel of tape, takeup reel, earphone. From Japan.
15 A 7528 X. Shpg. wt., 8 lbs....................42.95

SONY/SUPERSCO

Battery/AC with automatic level control

69⁹⁵

*$5 monthly**

Model 910. Operates on 4 "D" batteries, nickel-cadmi
batteries (recorder has recharging circuit), or 117 V
Records and plays 2-track mono at 3¾ or 1⅞ ips. Au
matic level control prevents distortion. Level me
Automatic tape lifter protects heads during fast forw
and rewind. 4½x8¾x8½". With start-stop mike, "
batteries, AC cord, takeup reel, earphone. Japan.
15 A 7254 X. Shpg. wt., 6 lbs....................69

**Get your recorder with no money down..full Credit details on page*

lied® portable Tape ssette Recorder with nap-on AC adapter

Compact solid-state recorder uses easy-loading snap-in tape cassettes for the ultimate in convenience

Was $59.95 in last year's catalog

NOW ONLY

39^{95}

$5 monthly*

REC.
ALLIED
SOLID STATE
Compact Cassette
C-60

Our lowest priced Allied Cassette Portable

- Space-saving cassettes snap in or out easily
- Easy-to-use keyboard-type controls
- Solid-state circuit for lasting reliability
- Offers greatest convenience and versatility
- Combined record level/battery condition meter
- With unique snap-on adapter for 117 VAC

e perfect portable for everyone from jet-setters to dents, housewives to executives. Use it in classrooms, , home, yacht or office. Use it for taping lectures, iness meetings, correspondence, dictation, parties bedtime stories for tiny tots. Compact, streamlined ing and battery/AC operation make it great for any d of on-the-go recording.

ace-age design lets you "jettison" the AC adapter en using batteries . . at home, the unique 117 VAC pter snaps-on to become part of the recorder. apter has cord-storing compartment. Features key-rd-type pushbutton controls with fast forward and ind. Record interlock prevents accidental erasure apes. Meter reads level on record, indicates battery dition during playback.

Records and plays up to two hours (both tracks) of clear, distinct mono on modern, miniature tape cassettes. Easy-to-store cassettes snap in or out of recorder instantly . . no tapes to thread or rewind, no reels to fumble. Big 3½" speaker delivers clean, clear sound. Recorder has jack to allow use of an extension speaker. Thumbwheel volume control.

Complete with 5 "C" batteries, snap-on 117 VAC adapter, remote start-stop dynamic mike, 60-minute C-60 tape cassette, earphone and vinyl carrying case for portable use. Additional tape cassettes are available on page 156 of this catalog. Size, 2½x5x12" with adapter (2½x5x8" less adapter.) From Japan.

15 A 7138 X. Shpg. wt., 7 lbs. 39.95
18 A 5078. Extra "C" Batteries. Wt., 10 oz. . Pkg. of 2/33¢

Our finest Allied Cassette Tape Recorde

Was $89.95 in last year's catalog

NOW ONLY

69.95

$5 monthly*

Full 200-11,000 Hz frequency response for crystal-clear tapes . . Records anywhere on batteries or built-in AC

Full-feature portable for professional-quality tapes

- Automatic level control for flawless recordings
- Five pushbuttons for easy operation by anyone
- 1¼-watt audio power and wide-range response
- Built-in AC power supply, no adapter required
- Continuous tone control • Monitor switch
- With remote start-stop mike, cassette and case

Model 1150. Here's a take-along recorder with every wanted feature, at an unbeatable low price. It's the perfect portable for students, executives or salesmen who want professional-quality recordings every time. Lots of uses in the home, too. Records up to two hours on snap-in cassettes that load and unload instantly. No reels to change, never any threading or handling of tape. Solid-state circuit has frequency response of 200 to 11,000 Hz for high-quality recordings of voice and music. Delivers 1¼-watt audio power for plenty of volume without distortion. Automatic level control circuit may be switched in to smooth out variations in recording level for always-perfect voice recordings. Five keyboard-type pushbuttons for stop-open, rewind, fast forward, play, pause (for editing as you record). Features monitor switch, plus auxiliary input, that permits listening as you record from a radio, phono or TV. Has combination recording level/battery condition meter. Continuous tone control. Flutter and Wow: less than 0.5% rms. Signal-to-Noise Ratio: better than 38 dB. Push-pull audio output circuit cuts distortion. Includes remote control start-stop dynamic microphone, earphone for private listening, patch cord for taping direct from radio-TV-phono, one 60-minute recording cassette, plus a carrying case with shoulder strap. Order six batteries, below. High-impact case, 9⅜x6x2⅝" deep. From Japan. (Extra recording cassettes are sold on page 156.)

15 A 7116 X. Shpg. wt., 5 lbs. 69.95

"C" Batteries. (Uses 6.) Shpg. wt., 10 oz.

18 A 5078 ....Pkg. of 2 for 33¢

**Buy your recorder with no money down . . see page 4*

:ompact, portable
:assette Recorder
/ith level control

omatic level control keeps recording
l constant for clear, distortion-free
ordings regardless of voice variations

ersatile portable tape cassette recorder at a remark-
 low price. Perfect for students, great for lectures,
es, parties, or for correspondence. And even at this
 price you get automatic level control for professional
ordings every time. Record and play up to two hours
2-track mono on shirt-pocket size tape cassettes.
-up cassette loading and removal . . change tapes
kly and easily without rewinding or threading.
ce-saving cassettes are easy to store and mail, too.

y-to-carry solid-state recorder operates on 4 "C"
eries. Take it along anywhere to capture the sounds
he moment on tape to be enjoyed time after time.
 keyboard-type pushbutton controls with fast for-
d and rewind, plus cassette pop-up button. With
ote start-stop mike and carrying strap. Order bat-
es below. Less cassette. 3x5x10". Japan.
7055 X. Shpg. wt., 3 lbs. **24.95**
5078. "C" Batteries. 10 oz. . . . .**Pkg. of 2/33¢**

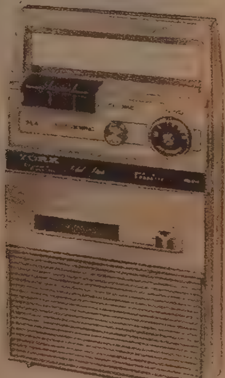
Full-feature
Tape Cassette Recorder
at a budget price

24^{95}

$5 monthly*

- **Pop-up cassette loading**
- **Automatic level control**
- **Pushbutton operation**
- **All solid-state circuit**
- **Records and plays up to 2 hours, 2-track mono**
- **Remote start-stop mike**
- **2¾" dynamic speaker**

Cassette Recorders and Players



ortable Cassette Recorder

29^{95} *Automatic level control circuit*

asonic RQ-204S. For business or
asure, this is an ideal recorder.
ords and plays up to two hours of
stal-clear 2-track mono. Cassette
tor for instant cassette changing.
sy-to-use single-knob function con-
. Automatic level control for con-
nt-volume voice recordings.

ord level/battery condition meter.
lt-in speaker, preamp output. 9x
2¾". With start-stop mike, cas-
e, 6 "C" batteries. Takes optional
 VAC adapter below. Japan.
A 7477 S. Shpg. wt., 5 lbs. . . .**29.95**
A 7478. AC Adapter. 1 lb. **6.95**

Cassette Recorder

29^{95} *Constant-speed capstan drive*

Aiwa TP-739. An unbeatable value for almost any portable recording need. Small in size and price, yet offers full-feature performance. Records and plays up to two full hours on easy-loading snap-in tape cassettes. Perfect for taped correspondence. Capstan drive for constant tape speed.

Recorder has convenient single-lever function control, record interlock to prevent accidental erasure. Complete with mike, 4 "C" batteries, one 60-minute cassette, earphone. Only 2½x5½x8½". From Japan.
15 A 7054 X. Shpg. wt., 3 lbs. . . .**29.95**

Cassette Player/AM Radio

Player/ Radio 24^{95} | **Player Alone 19^{95}**

York KPR-88. Great idea in portable entertainment. Compact cassette player with built-in AM radio. Let's you hear your favorite radio programs, or listen to pre-recorded tape cassettes. Plays mono or stereo tapes monophonically. Easy-to-use keyboard controls for tape player. With 4 "C" batteries, earphone. *Does not record.*
15 A 7053 X. Japan. 3½ lbs. **24.95**

York KP-55. Tape Player. Above, less radio. *Does not record.* With batteries, earphone. 2½x6x10".
15 A 7052 X. Japan. 3 lbs. **19.95**

Our greatest selection ever of portabl

Panasonic battery/AC Cassette Recorder

Convenient pop-up cassette ejector

39^{95}

$5 monthly*

Model RQ-209S. Versatile recorder features pushbutton controls with pop-up cassette ejection for fast loading and removal of cassettes. Fast forward and rewind. Plays on 4 "C" batteries or 117 VAC. Automatic level control prevents distortion on voice recordings. Response, 80-8000 Hz. Built-in speaker. Mike and aux. inputs. Monitor output. With remote start-stop mike, pre-recorded cassette, earphone, batteries. 2¾x5½x10¼". Japan.

15 A 7225 X. Shpg. wt., 3 lbs. 39.95

Craig battery/AC Cassette Recorder

"T" control for easy operation

49^{95}

$5 monthly*

Model 2603. Cassette version of the popular "212" ope reel recorder. Famous "T" control for easy operatio Uses 4 "C" batteries or 117 VAC. Automatic level contr keeps recording level constant, prevents distortion. Recor interlock prevents accidental erasure of tapes. Cassett snap in or out easily. With start-stop mike, AC cord. Ord batteries below. 5¼x9x2¾". Japan.

15 A 7474 S. Shpg. wt., 4 lbs. .49.9

18 A 5078. "C" Batteries. 10 oz. . . . . .Pkg. of 2/3

39^{95}

$5 monthly*

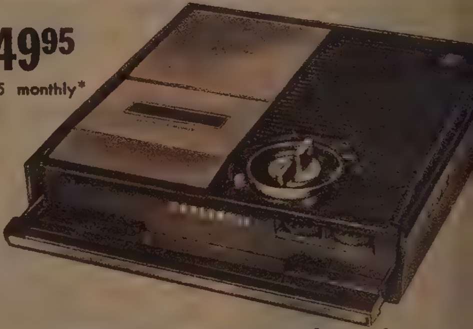
Aiwa deluxe Tape Cassette Recorder

Model TP-707PJ. Smartly-styled recorder records or plays up to two hours (both tracks) on compact cassettes. Has pop-up cassette loading. Separate record level and playback volume controls. Pushbutton operation with fast forward and rewind. Record level/battery condition meter. With 4 "C" batteries, start-stop mike, C-60 60 minute cassette, earphone. 2¼x8x5¾". Japan.

15 A 7308 S. Shpg. wt., 5 lbs. .39.95

49^{95}

$5 monthly*



Panasonic Cassette Recorder with ALC

Model RQ-203S. Take this fine recorder anywhere fo recording or playback of 2-track mono cassettes. Operates on 6 "C" batteries or 117 VAC. Automatic leve control prevents distortion. Boasts fast, easy pop-u cassette loading and removal. Single-knob functio control. 3" speaker. Monitor facility. With start-sto mike, batteries, cassette. 2¾x9x10". Japan.

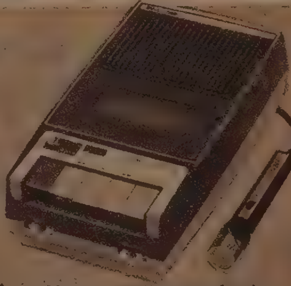
15 A 7491 X. Shpg. wt., 5 lbs. 49.9

Crown portable Tape Cassette Recorder

With custom leather carrying case

49^{95}

$5 monthly*



Model CRT-9001. Latest Crown tape cassette recorder includes a handsome leather carrying case with accessory compartment. Records and plays crystal-clear 2-track mono on easy-loading cassettes. Keyboard controls with fast forward. Tone control. Record level/battery condition meter. With 4 "C" batteries, start-stop dynamic mike, C-60 cassette, earphone. 2½x4¾x8$\frac{3}{16}$". Japan..

15 A 7533 X. Shpg. wt., 3¼ lbs. 49.95

Wollensak compact Cassette Recorder

Separate record level and volume controls

69^{95}

$5 monthly*

Model 4200. Convenience-engineered recorder has sing 4-position switch for instant control of tape directio Record safety interlock; record level/battery conditio meter. Response; ±3 dB, 80-10,000 Hz. With remo start-stop dynamic mike, C-60 tape cassette, carrying cas 4½x7⅞x2¼". Order batteries below. Imported.

15 A 7349 X. Shpg. wt., 4 lbs. 69.9

18 A 5078. "C" Batteries. Uses 5. Wt., 10 oz. . .Pkg. of 2/3

lid-state Tape Cassette Recorders

pex battery/AC portable Tape Cassette Recorder

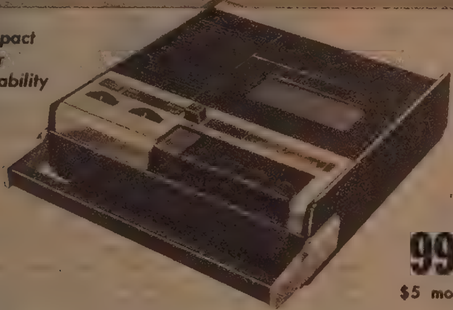
Recharges nickel cadmium batteries while playing on AC
Delivers over 2-watt peak power output to big 5" speaker

89^{95} $5 monthly*

› 24. Smartly-styled for convenience
versatility . . . ruggedly made for
.ble use. Records or plays up to 2
s of 2-track mono on compact tape
ettes using 5 "D" batteries or 117
. Automatically recharges nickel
nium batteries while operating on
Fast, easy pop-up cassette loading.

ibutton controls with fast forward
rewind; switchable automatic re-
ing level control; digital counter;
control. Record level/battery con-
n meter. With leatherette carrying
. Start-stop dynamic mike, earphone,
cassette. 3x7x12". Order batteries
w (uses 5). From Japan.
7521 X. Shpg. wt., 10 lbs. 89.95
5634. Ni-Cad Battery. 3 oz. . . . Ea. 6.30
5862. "D" Batteries. 8 oz. . . Pkg. 2/38¢

im, compact
sign for
sy portability



^{95}
monthly*

Crown battery/AC Cassette Recorder

el CTR-8750. Record and play up to 2-hours of ex-
nt 2-track mono anywhere. Works on 4 "C" bat-
s or 117/220 VAC. Pushbutton controls; record
/battery condition meter; tone control. Tape cas-
s load or remove instantly. Response, 100-10,000
2x4" dynamic speaker. With start-stop mike, bat-
s. 2½x7⅝x7$^{11}/_{16}$". From Japan.
7525 X. Shpg. wt., 6 lbs. 69.95

With built-in
electret-condenser
microphone

99^{50}
$5 monthly*

Sony/Superscope battery/AC Cassette-Corder

Model TC-110. Sensitive built-in mike can be used alone or with external mike. Easy cassette loading, ejector button. Uses 4 "C" batteries or 117 VAC. Pushbutton controls; level/battery meter; tone control; end-of-tape alarm. Start-stop mike, set of batteries, leather carrying case, earphone, plus one C-60 cassette. Size, 5½x2⅜x 9⅜". From Japan.
15 A 7066 X. Shpg. wt., 7 lbs. 99.50

9^{50}
monthly*

ny/Superscope executive Cassette-Corder

el TC-120. Deluxe recorder features a built-in high-
tivity mike. Provides top performance on 4 "C" bat-
s, rechargeable Ni-Cad batteries, or 117 VAC. Digital
ter, level/battery meter, end-of-tape alarm. With
-stop mike, four "C" batteries, leather carry case, C-60
cassette, earphone, built-in recharging circuit. 2½x
x6". From Japan.
7067 U. Shpg. wt., 9 lbs. 129.50

Back-space cuing
for easier
transcribing

69^{50}
$5 monthly*

Sony/Superscope battery/AC Cassette-Corder

Model TC-70. Perfect for business use. Smart slide-panel styling. Start-stop mike for dictation . . back space cuing for easier transcribing. Instant cassette loading, ejector button. End-of-tape alarm, level/battery meter. Uses 4 "C" batteries or 117 VAC. With mike, earphone, four "C" batteries, convenient tote bag for recorder and accessories. $2^{5}/_{16}$x$8^{13}/_{16}$x8¼". Japan.
15 A 7074 X. Shpg. wt., 9 lbs. 69.50

Compact Cassette Recorders . . many with

Ampex pocket-size portable Cassette Recorder

89^{95}
$5 monthly*

Advanced solid-state design includes integrated circuits for trouble-free performance and longer battery life

Micro 7. Professional-quality cassette recorder for schoo
business, interviewers. Great for dictating, taking notes
recording lectures. Records and plays up to two full hours
monophonic sound on instant-loading tape cassettes. Eas
to-use controls include pushbutton fast forward and rewin
slide-lever for play or record, record interlock; pushbutt
cassette ejector. Recording level/battery condition mete
Operates on 3 "AA" penlight cells. With remote contr
start-stop dynamic mike, C-60 cassette, batteries, earphon
and leatherette carrying case. Only $6\frac{3}{4}$x$1\frac{3}{4}$x$4\frac{1}{2}$".
15 A 7529 S. Shpg. wt., $2\frac{3}{4}$ lbs. Japan. 89.9

Panasonic miniature Recorder has ALC plus pop-up loading

99^{95} **$5 monthly***

Automatic level control prevents distortion for professional recordings

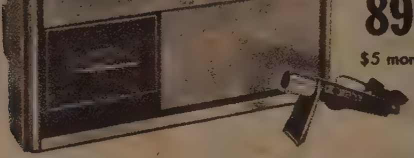
Model RQ-210S. Battery-powered cassette recorder has six integrated circuits for finest performance and smaller size. Handy single touch-lever operation and fast, easy pop-up cassette loading. Automatic level control eliminates distortion from over-recording. Record level/battery condition meter. Output for external amplifier. With remote start-stop mike, 4 "AA" batteries, C-60 tape cassette, earphone and carrying case. $1\frac{7}{8}$x$3\frac{3}{4}$x$6\frac{7}{16}$". From Japan.
15 A 7461 S. Shpg. wt., $2\frac{1}{2}$ lbs. 99.95

Sony/Superscope
Cassette-Corde
. . built-in mike

119^{50}
$6 monthly*

Actually smal
enough to fit i
your coat pocke

Model TC-50. Fully self-contained cassette recorder i
amazingly small and lightweight, can actually fit in a
coat pocket, yet provides performance comparable to
larger models. Features separate built-in mike and
speaker, record level/battery condition meter, con
venient pushbutton controls. Automatic recording
control for distortion-free recording. Complete with
snap-in battery pack, 4 "AA" batteries, leather carrying
case, C-60 cassette. 7x3x$1\frac{1}{2}$". Japan.
15 A 7073 S. Shpg. wt., 2 lbs. 119.50



York battery/AC Recorder with FM-AM

89^{95}
$5 monthly*

Model KR-120. Smartly-styled portable combines full-feature cassette recorder with FM-AM radio in one, easy-to-carry unit. Plays anywhere on batteries or 117 VAC. Solid-state circuit provides good FM-AM reception. AFC switch to prevent FM drift. AM, telescoping FM antennas. Recorder has keyboard controls, pop-up loading, level/battery meter. Large 5" speaker. Tone control. With remote start-stop mike, 6 "D" batteries, earphone, cassette. $11\frac{1}{8}$x$3\frac{3}{4}$x$13\frac{1}{4}$". Japan.
15 A 7056 X. Shpg. wt., 10 lbs. 89.95

89^{95} **$5 monthly***

Sharp battery/AC Recorder/FM-AM Radio

Model RD-404. Versatile cassette recorder/FM-AM
radio operates on batteries, 117 VAC or 12 VDC with
optional car cord (below). Records and plays up to two
hours on instant loading cassettes. Pushbutton controls,
level/battery meter, automatic level control. Record
with mike or directly from radio. Tone control. Tele-
scoping FM antenna. With 4 "C" batteries, start-stop
mike, cassette. $2\frac{3}{4}$x$12\frac{1}{16}$x$8\frac{3}{16}$. From Japan.
15 A 7118 X. Shpg. wt., 5 lbs. 89.9
15 A 7120. 12 VDC Car Cord. 8 oz. 5.9

*See page 438 for full Credit details . . low monthly paymen

ilt-in FM-AM Radio and battery/AC versatility

ex Cassette Recorder with FM-AM Radio

n charger automatically
ges optional nickel-cadmium
ies while playing on 117 VAC

129^{95}
$7 monthly*

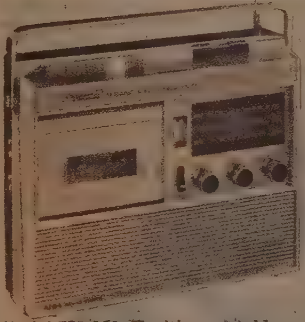
32. Record live or from built-in FM-AM radio.
natic level control for perfect voice recordings,
e switched off for full-range music recording.
utton operation, digital counter, level/battery
. Plays cassettes with over 2-watt peak music
through big 5" speaker. Switch eliminates radio
erence while recording. For batteries or 117 VAC.
stop mike, carry case, 5 "D" batteries, earphone,
assette. Ni-cad batts. below. 3x7x12". Japan.
524 X. Shpg. wt., 8 lbs. 129.95
634. Nickel-Cadmium Batteries. 3 oz. 6.30

Record direct from FM, AM or mike

99^{50}
$5 monthly*

cord battery/AC FM-AM "Radiocorder"

F-103. Portable cassette recorder with built-in
M radio is an entertainment center in itself.
eature cassette recorder records and plays up to
ours on space-saving tape cassettes. Record direct
radio, or live with mike. Record level/battery
tion meter. AFC on FM. Slide-rule tuning. Tone
ol. Operates on 5 "D" batteries (order below) or
AC. With start-stop mike. 12x9x11½". Japan.
536 X. Shpg. wt., 5½ lbs. 99.50
079. "D" Batteries. 10 oz. . . . . Pkg. of 4/65¢



Aiwa Cassette Recorder with 3-band Radio

119^{50}
$6 monthly*

Radio tunes FM, AM, 1.6-4 MHz marine band

Model TPR-101. Exciting portable cassette recorder has a built-in 3-band radio. Enjoy listening to your favorite FM or AM stations, plus 1.6-4 MHz marine band. Tape directly from the radio, live with a mike, or play prerecorded tapes. Uses 4 "D" batteries or 117 VAC. Pushbutton record function controls and band selection. Level/battery meter. Tone control; 5x3" speaker. AM, telescoping FM antennas. Mike, batteries, earphone, cassette. 11¼x3½x9". Japan.
15 A 7114 U. Shpg. wt. 6½ lbs. 119.50

Aiwa battery/AC Cassette Recorder with FM Radio

69^{95}
$5 monthly*

Automatic cassette pop-up and shutoff at end of tape play

TPR-104. Compact portable cassette recorder
res a built-in FM radio. You can record directly
the radio, record live with a mike, or just listen
e radio or prerecorded tapes. Plays anywhere on
batteries or 117 VAC. Automatic cassette pop-up
shuttoff at end of tape. Easy-to-use pushbutton
ols, monitor switch, tone control. Telescoping
antenna. With remote start-stop mike, batteries,
one, cassette. 10¼x7½x3¼". Japan.
7166 X. Shpg. wt., 5 lbs. 69.95

Battery/AC operation

79^{95}
$5 monthly*

Panasonic Cassette Recorder/FM-AM Radio

Model RQ-232. All the convenience of an easy-loading cassette recorder, plus FM-AM radio. Record and play anywhere on 6 "C" batteries or 117 VAC. Automatic level control gives you distortion-free recordings every time. Cassette pops up for easy changing. Record with mike or direct from radio. Slide-rule dial with thumbwheel tuning, switchable AFC, tone control. Response, 70-10,000 Hz. With remote start-stop mike, batteries, earphone, prerecorded cassette. 3x9½x11". Japan.
15 A 7227 X. Shpg. wt., 6 lbs. 79.95

Huge selection of Stereo Cassette Tape Deck

CRAIG

79^{95}
$5 monthly*

59^{95}
$5 monthly*

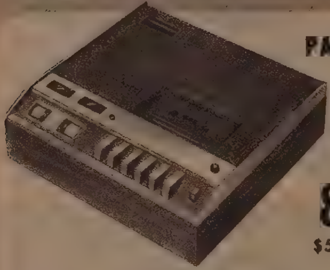
Stereo Cassette Deck with ALC

Model 2708. Just drop in cassette and push a button to record or play! Automatic level control prevents distortion. Records stereo or monophonic for playback through your music system. Recording signal indicator, digital counter. Response, 50-12,000 Hz. Has walnut grain finished plastic case. 3¾x14¼x9¼". 117 VAC. Japan.
15 A 7480 X. Shpg. wt., 13 lbs. 79.95

Low-priced Stereo Cassette Player

Model 2804. Compact deck plays through any stere mono amplifier or receiver—lets you enjoy the v variety of pre-recorded tape cassettes available. Easy operate keyboard controls; digital counter accura locates tape selections. Cassettes are easy to load and move. *Does not record.* 3¾x14¼x9¼". 117 VAC. Ja
15 A 7479 X. Shpg. wt., 9 lbs. 5

PANASONIC

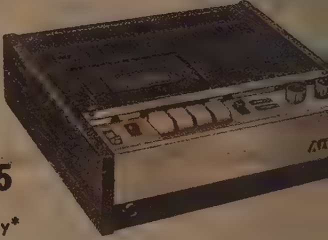


89^{95}
$5 monthly*

Stereo Cassette Deck in wood case

Model RS-256US. Smart looking—top performing—ideal for use with any stereo system. Pushbutton controls, level meters, easy cassette loading. Records stereo and monophonic. Automatic stop on playback. 30-12,000 Hz response. Inputs: 2 mike, 2 aux. Stereo headphone jack. Walnut veneer case, 10⅞x 3¾x10". 117 VAC. Japan.
15 A 7154 X. Shpg. wt., 10 lbs. 89.95

AIWA



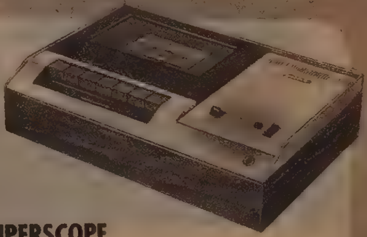
99^{95}
$5 monthly*

Stereo Cassette Deck . . headphone jack

Model TP-1009. Smartly-styled deck with walnu wood sides. Pushbutton controls, cassette "pop up." Records stereo and monophonic for pla through your system. Level meters, pause contro counter. 50-10,000 Hz response. Inputs: 2 mike, aux. Stereo headphone jack. With C-60 cassette patch cords. 3¼x11x10". For 117 VAC. Japan
15 A 7251 S. Shpg. wt., 9 lbs. 99.9

SONY

109^{50}
$6 monthly*



SONY/SUPERSCOPE

Sonymatic Stereo Cassette Deck has ALC

Model TC-125. Connects easily to your present stereo system to provide complete cassette record and playback facilities. Records and plays stereo cassettes (compatible with monophonic) up to 120 minutes. Automatic Level Control prevents blasting, assures even volume. "Pop-up" cassette ejector. 50-10,000 Hz at 1⅞ ips. 3⅜x13x7⅜". C-60 cassette, patch cord. 117 VAC. Japan.
15 A 7588 U. Shpg. wt., 7½ lbs. 109.50

CRAIG

119^{95}
$6 monthly*

Feature-packed Stereo Cassette Deck

Model 2704. Designed for operating convenience anc fine performance. Records stereo or monophonic for play through your music system. Easy-to-use keyboard-type pushbutton controls. Illuminated level meters, magnified instant-reset digital counter 2 mike, 2 aux. inputs. Stereo headphone jack. 50-10,000 Hz at 1⅞ ips. Walnut-finish wood cabinet 3¾x14¼x9½". 117 VAC. Japan.
15 A 7252 U. Shpg. wt., 13 lbs. 119.9

**Buy your Cassette Recorder with no money down . . . see page 438 for det*

ɪoose from the world's best known names

ɪMPEX

9^{95}

monthly*

ɾofessional Stereo Cassette Tape Deck

ɪo 52. Handsome smoked plastic panels and wal-
veneers—beautiful addition to your stereo
em. Features stereo mixing with individual level
:rols—mike and line inputs for each channel.
hbutton controls for all functions; "pop-in"
ette loading; recording indicator light; digital
ater; 2 level meters. Automatic Level Control
ıres virtually distortion-free recordings—switches
for full dynamic range. 40-12,000 Hz response.
x16¼x5¾". With 2 mikes, demo tape. 117 VAC.
7540 U. Japan. Shpg. wt., 15 lbs. 149.95

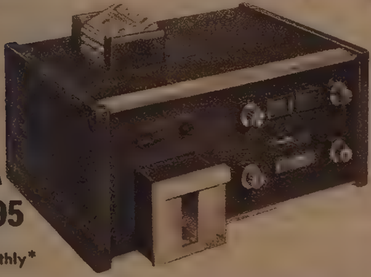
TEAC

139^{50}

$7 monthly*

All-silicon Stereo Cassette Tape Deck

Model A-20. Provides full-fidelity tape deck performance plus cassette convenience. Quality features include: two precision heads, outer rotor motor drive system, all-silicon transistor amplifier. Hysteresis synchronous motor provides efficient drive and stable tape travel. "Pop-up" cassette housing opens when stop button is pressed. Pause control, 2 recording level meters, headphone monitoring facility. 60-10,000 Hz. 4¼x9¾x10". With unidirectional stereo mike. 117 VAC. Japan.
15 A 7455 U. Shpg. wt., 14 lbs. 139.50



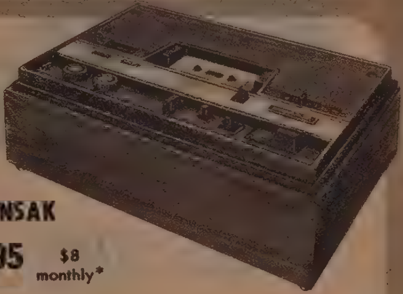
ɪWA

9^{95}

ɪ monthly*

ɪto-Changer Stereo Cassette Tape Player

ɪdel TP-1018. Amazing automatic cassette changer
provide up to 9 hours of continuous entertain-
ɪt using C-90 cassettes. For commercial or home
. Reject button stops cassette playing, starts a
ɪ one. All silicon transistor circuit. Hysteresis-
chronous motor, 2 level meters, tone control. 40-
)00 Hz response. Headphone jack. *Does not*
ɪrd. Wood case, 7⅞x15¾x9⅞". With 2 patch
ds. 117 VAC. From Japan.
ɪA 7467 U. Shpg. wt., 20 lbs. 189.95



WOLLENSAK

159^{95} $8 monthly*

Deluxe Stereo Cassette Tape Deck

Model 4700. Records and plays stereo or mono through your music system. Features interlock controls to permit changing the function of the recorder without stopping it. Has two recording level meters, digital counter, convenient tape cassette ejector. Response: ±3 dB, 60-12,000 Hz. Signal-to-noise ratio: better than 46 dB, Mike and phono inputs, preamp outputs. Handsome cabinet, 13⅞x9¼x4½". With 60-minute tape cassette. 117 VAC.
15 A 7338 X. Shpg. wt., 13 lbs. 159.95

Cassette Tape Recorder/Player with built-in 10-watt stereo amplifier

vo illuminated record level meters
ʼith 2 remote on-off microphones
oeaker monitor switch

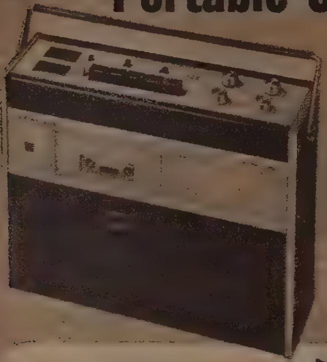
159^{95}

$8 monthly*

CAH-2000. Deluxe recorder packed with quality
es. Safety interlock prevents accidental erasures
mage to pre-recorded tapes. Speaker monitor
lets you hear recording source. Two illuminated
neters, pushbutton function selectors, pause con-
ligital counter. Balance, volume, tone controls.
nse: 50-12,000 Hz at 1⅞ ips. Smart, slimline cabi-
¾x13½x8⅝". With 2 mikes and stands, patch
(Order 8-ohm speaker systems from pages 68-
or 117 VAC. From Japan.
179 U. Shpg. wt., 15 lbs. 159.95

AUTOMATIC RADIO

Portable Stereo Cassette Tape Recorde



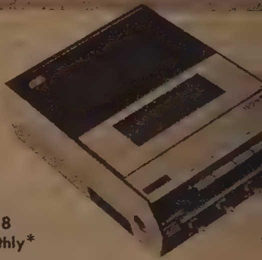
Concord solid-state recorder with automatic level contr

139^{50}

- Operates on batteries or house current
- Two built-in speakers
- Pushbutton operation

Model F-400. Record and listen to your favorite sounds of stereo at th
markable low price. Versatile recorder tapes outstanding 4-track ster
mono on compact, convenient cassettes. Just snap-in and you're rea
record or playback. Switch-controlled Automatic Level Control for
distortion-free recording of conferences. Operates on its own self-cont
batteries or from standard 117 VAC. Quality transport features pushb
operation. Plays through its own speakers, has outputs for auxiliary spea
plus preamp output. Powerful 8-watt stereo amplifier. Complete wit
namic remote-control mike, one blank cassette, 6 batteries. Order addit
blank tape cassettes from page 155. Overall dimensions, 9¾x12⅜x
From Japan.
15 A 7322 U. Shpg. wt., 12 lbs. 1

Recorder plus Two Wing Speakers 175^{00} $9 monthly*



Sony/Superscope ultracompact battery/AC Stereo Cassette Recorders

Recorder Alone 149^{50} $8 monthly*

A **Model 124-CS.** Battery/AC stereo cassette recorder with bu
speaker *plus* two detachable wide-range speakers for true
ration. Features convenient pushbutton operation; pop-up ca
ejector; Sonymatic recording control. Has record level/ba
indicator; separate tone and volume controls; balance contro
capability. Microphone and auxiliary inputs; stereo spea
headphone outputs. 4-track stereo (compatible with 2-track m
recording system at 1⅞ ips. Response, 50-10,000 Hz. S/N, 4
Flutter/wow, 0.28%. Stereo mike, C-60 cassette, earpho
patch cords, batteries, AC power cord, carrying case. Size,
6$^{11}/_{16}$x9$^{25}/_{32}$". Japan.
15 A 7589 U. Shpg. wt., 12 lbs. 1

B **Model 124.** Stereo recorder with same features as rec
above, but no detachable speakers. Stereo speaker outpu
15 A 7590 U. Shpg. wt., 5 lbs. 1

Battery/AC

Crown Stereo Cassette/ Stereo FM-AM

159^{50} $9 monthly*

Model CSC-9350. A complete portable entertainment center at a modest price. Includes stereo FM-AM radio, stereo cassette tape recorder, and detachable speakers. Records directly from radio . . stereo FM has striking realism. Makes "live" recordings from mikes. Convenient pushbutton recorder operation. Tone control. Record level meters. Aux. input, preamp output, stereo headphone jack. AFC. Hi-impact case. 12½x17½x4". With mikes, C-60 cassette, batteries. 117 VAC. Japan.
15 A 7530 U. Shpg. wt., 11 lbs. 159.50

Aiwa battery/ Stere Casset Record

109

$6 month

Model TP-1004. Compact recorder records and pla
track stereo and mono. Here is a budget-priced
able with many quality features. Pushbutton cont
level and tone controls for each channel, two re
level meters. Two 3x5" speakers in matching e
sures. Accessory storage compartment for added
venience. Lets you record from all sources—r
phono, TV. Outfit includes two dynamic mikes
with remote control), C-60 cassette, two earpho
For 115 VAC or batteries (included). 12¾x13x
15 A 7162 U. Japan. Shpg. wt., 9 lbs. 10

Stereo Cassette Recorders for the home

Wollensak Stereo Cassette Recorder

pression-loaded wing speakers
two dynamic mikes and one cassette

199^{95}

4800. Deluxe stereo recorder with latest features.
ll the young sounds of stereo on trouble-free, snap-
ettes. Records and plays mono or stereo at 1⅞ ips.
: interlocked controls permit changing the function
machine without stopping it. Two level meters,
r, cassette ejector. Mike and phono inputs. Preamp
. Advanced solid-state circuitry. Delivers 8 watts of
power to two compression-loaded speaker systems.
ıse: 60-12,000 Hz. Recorder size, 4½x13⅞x9¼";
rs each, 4⅛x13½x8⅛". With 2 mikes, 60-minute
e. For 115 VAC.
583 U. Shpg. wt., 22 lbs. 199.95

199^{50}
$10 monthly*

y/Superscope Stereo Cassette-Corder

130. Full cassette recording facilities, plus
ing oiled walnut speakers. Full 15-watt music
stereo amplifier. Speaker monitor switch; bal-
volume, tone controls. Noise suppressor switch.
matic" automatic recording level. Pause con-
digital tape counter, headphone jack. $3\frac{15}{16}$x
.$9\frac{7}{16}$". 50-10,000 Hz. With mike, C-60 blank
te, patch cord. 117 VAC. Japan.
'587 U. Shpg. wt., 9½ lbs. 199.50

269^{95}
$14 monthly*

Ampex automatic Cassette-changing/Recorder

Micro 95. Lets you stack up to 6 cassettes at one time for a full 6 hours of non-stop stereo recording or playback. Automatically moves played cassettes into storage compartment. Easy-to-use pushbutton recording controls. Record level meter for accurate monitoring. Solid-state circuitry. With 2 dynamic mikes, matched 6x9" speakers in walnut enclosures. Preamp outputs. 15¼x9¼x4⅜". 110 VAC.
15 A 7539 U. Shpg. wt., 22 lbs. 269.95

219^{95}
11 monthly*

ex high-performance Cassette Recorder

87. Records up to 120 minutes of stereo from
ound source—radio, phono, or live performances.
all prerecorded stereo and mono cassettes with
atts of power through wide-range 6x9" speaker
ms. Switchable Automatic Level Control. Push-
n function controls. Digital counter for indexing
. Headphone output. Record level meter.
hronous motor provides constant speed. Hand-
ly finished in walnut cabinetry. With two mikes,
: cassette. Player, 10¼x16¼x5¾"; speakers, 9x
x7¼". 117 VAC.
7538 U. Shpg. wt., 34 lbs. 219.95

149^{95}
$8 monthly*

Midland home Stereo Cassette Recorder

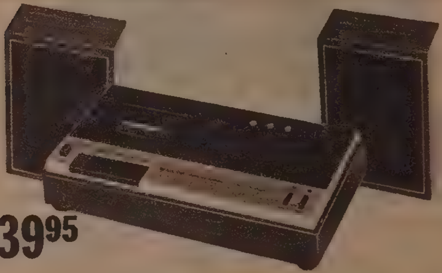
Model 12-157. Attractive low-profile model records, plays, amplifies cassettes through matched 4x6" speakers. Delivers 5-watt peak power. Accepts all standard stereo or mono cassettes. Offers pop-up loading, pushbutton function controls, slide-type volume and tone controls. Two illuminated recording meters. Synchronous motor for constant speed. Inputs: mikes, radio. Outputs: speakers, preamp, headphone. Wood cabinetry in walnut finish. With 2 remote mikes, smoked dust cover, 2 patch cords, blank cassette. 3x13x9". 117 VAC. Japan
15 A 7178 U. Shpg. wt., 15 lbs. 149.95

Home Cassette Recorders, Recorder/Radios

189^{95}

Ampex Cassette Recorder/Stereo FM-AM

Model 87R. Stereo recorder, stereo FM-AM tuner, amplifier, speaker systems in 3-piece walnut ensemble. Recorder has ALC, level meters, hysteresis-synchronous motor, counter. Radio has FET, stereo light, "disappearing" dial. Control center has bass, treble, volume controls; inputs for mikes, magnetic phono, line; stereo headphone. 40-12,000 Hz. Control center, 10x16x5¾"; speakers, 9x14½x7¼". With 2 mikes, tape. 115 VAC. Japan.
15 A 7270 U. Shpg. wt., 36 lbs....................189.95



139^{95}

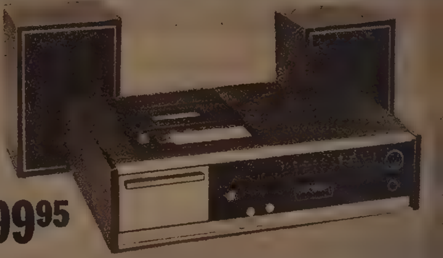
Craig deluxe Stereo Cassette Tape System

Model 2707. Compact system records and plays 4-track stereo/mono using efficient, snap-in cassettes. Separate speaker systems provide full-fidelity stereo sound. Features automatic level control, digital counter, keyboard-type pushbuttons for precise control of all operations. Slide controls for tone, balance and volume. Three-piece system is finished in walnut-veneer wood cabinets. Recorder, 3¼x14⅞x7¾"; speaker systems, 14⅞x7¾x3¼". Japan.
15 A 7486 U. Shpg. wt., 29 lbs....................139.95

199^{95}

Crown Stereo Cassette Recorder/FM-AM Radio

Model SHC-44B. Stereo recorder, stereo FM-AM radio and two speakers in three walnut-grain cabinets. Recorder has piano-type controls, monitor, stereo phono input. Radio has slide-rule dial, stereo FM light, distance/local switch, tone control. 100-10,000 Hz. Recorder, 3½x13¼x9"; radio, 3¼x4¼x9"; speakers, 8¾x13x4¼". With 2 mikes. Operates on AC or batteries (optional). Japan.
15 A 7513 U. Shpg. wt., 8 lbs....................199.95
18 A 5079. "D" Batteries (Uses 6.) Wt., 10 oz.....**Pkg. 2/33¢**



199^{95}

Craig Stereo Cassette Recorder/Stereo FM-A

Model 2705. Records and plays 4-track stereo with supe fidelity using quick-loading cassettes. FM-AM radio a two separate speakers offer exciting stereo entertainme Slide-rule dial tuning, stereo light, tone and balance co trols, stereo headphone jack. Recorder features digi counter, record-level VU meters, keyboard-type contro Handsome walnut-finish wood case, 4⅛x15⅞x10 Matching speakers, 15⅞x10¼x4⅛". Japan.
15 A 7489 U. Shpg. wt., 34 lbs....................199

199^{95}

Lloyd's Cassette Recorder/Stereo FM-AM Rad

Model 9V88. Stereo outfit in walnut finish cabinets cassette recorder and FM-AM radio with two speaker closures. Recorder uses easy-loading cassettes, has pia type controls, digital counter. Radio has lighted slide-r dial, logging scale; stereo headphone jack; volume, tuni tone, balance controls. Inputs for mikes, aux. Rad recorder, 3⅜x12¾x12" speakers, 16x9x6½". With mikes. For 115 VAC. Japan.
15 A 7177 U. Shpg. wt., 26 lbs....................199

299^{95}

Panasonic Cassette Recorder/Stereo FM-A

Model RE-7080. For the serious listener! Stereo FM-A radio has FET's, pushbutton band selection, automa touch-tuning. Sliding bass, treble, volume, balance co trols. Stereo FM light. Recorder has digital count Speaker systems have 8" and 2½" speakers. Inpu Mikes, stereo headphone, magnetic and ceramic cartrid Walnut. Recorder/radio, 16x13¾x6⅞"; speakers, 1 11⅛x6¾". 115 VAC. With two mikes. Japan.
15 A 7476 U. Shpg. wt., 31 lbs....................299

Telephone Answerers . . Cassette Recorders

Automatic telephone answering systems—essential for people on the go, in business or at home

9^{95}

monthly*

rown Telephone Answerer and Recorder

l CTA-4400. Practical and efficient telephone answerer its you to return important calls you have missed. natically answers your telephone for you when you're . Gives the caller your pre-recorded, up to 30-second ge, from an endless-loop tape. Also, records caller's ge on built-in cassette recorder for playback later. tte recorder is usable separately. Takes standard in cassettes. Installs in minutes, no re-wiring. Attractive walnut cabinet. Size, 3$\frac{5}{16}$x10$\frac{1}{16}$x12$\frac{13}{16}$". With endless tape, tape cassette and built-in mike. For 117 VAC. Japan. Shpg. wt., 9 lbs.

541 U. **199.95**

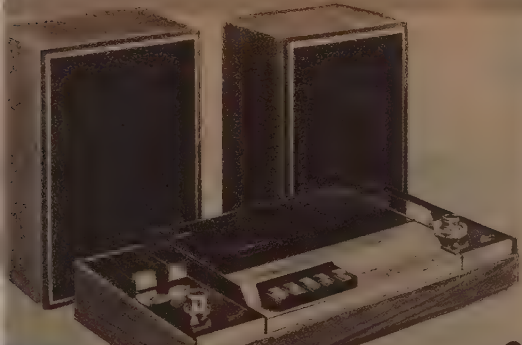
119^{95}

$6 monthly*

Crown Automatic Telephone Valet

Model CTA-4100. Automatic telephone answerer at a budget price. Perfect for home or business. Voice induction device automatically answers your telephone, gives caller a pre-recorded 30-second message and resets, ready for the next call. Hooks up to your phone quickly and easily. No re-wiring necessary. Your pre-recorded message, on endless-loop tape, is easily changed using built-in mike. Can also record caller's message, using any standard tape recorder with remote-control facilities. Solid-state circuit. Woodgrain steel cabinet, 3$\frac{3}{8}$x8$\frac{1}{2}$x10$\frac{7}{16}$". For 117 VAC. From Japan. Shpg. wt., 7 lbs.

15 A 7527 U. **119.95**



9^{95}

monthly*

and Stereo Cassette Recorder/FM-AM Radio

l 12-165. Solid-state stereo cassette recorder with FM-radio and two separate full-range speakers for stereo entertainment. Recorder controls include record, d, fast-forward, play and stop. Volume and tone con- Automatic level control. Recording monitor. Level r. Digital tape counter. 20 watts peak power, 5 watts per channel. FM-AM radio has lighted dial, stereo AFC switch. 3$\frac{1}{4}$x15$\frac{1}{2}$x9". Two 6" speakers in hand-, matching enclosures. Size, 5$\frac{3}{8}$x9$\frac{1}{8}$x7$\frac{1}{4}$". Plastic ut-finish cabinets look, feel like wood. With dust , 2 mikes, 60-minute cassette. Japan.

7176 U. Shpg. wt., 15 lbs. **179.95**

89^{95}

$5 monthly*

Midland Battery/AC Stereo Cassette Recorder

Model 12-150. Versatile, solid-state stereo cassette recorder plays anywhere. Operates on batteries for outdoor activities or indoors on AC cord. Features 2-channel sound-system with twin 2$\frac{1}{4}$x4" speakers for full-fidelity stereo sound reproduction. Uses efficient snap-in cassettes. Has left and right VU/battery level meters, volume controls, auxiliary and mike jacks. Pushbutton function controls for all recording operations. Mike and aux. inputs. High-impact polystyrene cabinet has wood-tone finish, dust cover, die-cast handle. With 4 "D" cells, 2 remote mikes and stands, blank cassette. 10$\frac{1}{2}$x16x4". Japan.

15 A 7175 X. Shpg. wt., 11 lbs. **89.95**

Stereo 8-track Tape Decks and Players

129^{50}

$7 monthly*

Sony/Superscope stereo record/play Deck

Model TC-8. Enjoy the luxury of snap-in tape cartridges and hours of uninterrupted stereo music. Solid-state 8-track cartridge deck records and plays through your hi-fi system. Tapes from TV, radio, phono, or live, using mikes. Plays any 8-track pre-recorded tape cartridge. Has stereo headphone jack, level meters, automatic shutoff, visual channel indicator. Response, 40-12,000 Hz. Less mikes, 8½x12x4½". For 117 VAC.
15 A 7047 U. Japan. Shpg. wt., 11 lbs. 129.50

169^{9}

$9 monthl

Viking stereo record/play Deck

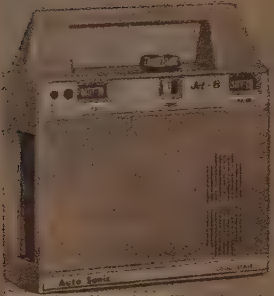
Model 811R. Deluxe solid-state deck in handsome walnut case records and plays 8-track stereo cartridge through your hi-fi system or console with excellen fidelity and response. Has pushbutton and automati track selection, level meter, record level control fo each channel. Can be set for continuous play or auto matic stop. Response, 40-15,000 Hz. Less mikes. Com pact case, 4½x15x11". For 117 VAC.
15 A 7440 U. Shpg. wt., 25 lbs. 169.9

Craig solid-state record/playback Stereo Tape Cartridge Deck

119^{95}

- Plays pre-recorded cartridges
- Continuous 8-track playback

Model 3302. Stereo tape system has fully automati cartridge selection. Records and plays 8-track tap cartridges through your hi-fi system. Record your ow tapes from radio, phono, or live, with mikes. Feature record signal meter, automatic level control, channe selector. Can be set for single selection or continuou play. Headphone jack. Response, 50-12,000 Hz. Les mikes. Walnut case. 4x9½x9". 117 VAC. Japan.
15 A 7472 U. Shpg. wt., 11 lbs. 119.9



Great for all outdoor activities

34^{95}

$5 monthly*

Lightweight, compact, goes anywhere

89^{95}

$5 monthly*

Battery-powered Portable [redacted] 8-track Tape Player

Big value in a small but mighty tape cartridge player, perfect for outdoor activities. Solid-state portable plays pre-recorded 8-track tape cartridges. Operates on six "D" batteries. Offers outstanding sound reproduction and easy snap-in cartridge operation. Has channel selector, tone controls, earphone jack, external power jack. Order batteries below. 8x6½x3". Japan. *(Does not record.)*
15 A 7181 X. Shpg. wt., 8 lbs. 34.95
18 A 5079. "D" Batteries. 8 oz. . . . Pkg. of 4/65¢

Automatic Radio 8-track battery/ stereo Tape Cartridge Player

Model SEP-9800. Take it along with anywhere! Portable stereo tape cartridge pl operates on house current, 8 "D" batterie 12-volt car battery. Snap-in any 8-track recorded tape cartridge and enjoy hour uninterrupted listening pleasure. Spea separate for full-dimensional stereo. Tone trols, level meters, channel selector. With teries, 12-VDC cord for car cig. lighter so 11x14½x5". Japan. *(Does not record.)*
15 A 7180 X. Shpg. wt., 10 lbs. . . . .

**Buy now with no money down . . see page 438 for full Credit de*

ereo Tape Cartridge Players and Tape Decks

3 Panasonic Players offer hours of ;tening pleasure, automatic operation

Ⓐ 69^{95} $5 monthly*

Ⓑ 129^{95} $7 monthly*

- Plays all 8-track cartridges
- Brilliant sound reproduction
- Automatic track changing
- Includes 2 speaker systems

Aodel RS-800AS. Plays 8-track cartridges through your hi-fi ausic system or console. Built-in solid-state preamp plugs auxiliary input of amplifier. Automatic or manual track iging. Track indicator lights. Tape speed, 3¾ ips. Response, 2,000 Hz. Signal-to-Noise ratio, 51 db. Deluxe walnut cabinet, :16½x8½". For 117 VAC. From Japan.
.7209 X. Shpg. wt., 8½ lbs. 69.95

Aodel RS-810S. Solid-state 8-track stereo cartridge player ith matching speaker systems. Automatic continuous play; ibutton track selector; balance, tone controls; mode selector. att-peak stereo amplifier, two separating speaker systems. ips. 50-12,000 Hz. 51 dB S/N. Phono, aux. inputs; head-e jack. Walnut cabinet. 4x16½x9". For 117 VAC. Japan.
.7142 U. Shpg. wt., 21 lbs. 129.95

Aodel RS-802US. Stereo cartridge tape deck plays 8-track artridges through your hi-fi system or console. Offers con-ent pushbutton program selection, easy-to-see lighted chan-indicators. Lets you enjoy uninterrupted music for hours. ponse, 50-12,000 Hz. Walnut-look metal cabinet, 4¼x8¼x '. For 117 VAC. From Japan.
.7161 X. Shpg. wt., 8 lbs. 49.95

Ⓒ

49^{95} $5 monthly*

CRAIG

59^{95} $5 monthly*

99^{95} $5 monthly*

teree 8-track Tape Cartridge Player Deck

l 3207. Solid-state 8-track cartridge player adds the nience and luxury of tape cartridge performance to stereo system. Plays through the amplifier of your system or console. Lets you enjoy unattended, unin-pted programming for hours. Plays any 8-track pre-led tape cartridge. Completely automatic, with eject-dge release button. Tape speed 3¾ ips. Response, ,000 Hz. Walnut cabinet, 6½x15x10". 117 VAC.
498 X. Japan. Shpg. wt., 9 lbs. 59.95

reo 8-track Tape Cartridge Player System

l 8400. Full-feature tape player at a budget price. all 8-track tape cartridges at 3¾ ips. Solid-state try features silicon transistors. Has pushbutton or natic track selection, lighted track indicators. Vol-balance and tone controls. Stereo headphone jack. ker systems have 4" woofer and 3" midrange/tweeter. ut-finish wood cabinet, 4¼x9½x10". Speakers, 9x6x esponse, 60-11,000 Hz. For 117 VAC. Japan.
7004 X. Shpg. wt., 20 lbs. 89.95

Stereo 8-track Tape Cartridge Player System

Model 3205. Complete stereo tape cartridge player ensemble with separate speakers offers outstanding hi-fi performance. Features automatic channel selector; cartridge-eject button; volume, balance and tone controls. Compact, space-saving design has walnut-finish wood cabinet, matching wide-response speakers. Tape speed 3¾ ips. Response, 50-12,000 Hz. Tape player, 4x11½x9½". Speakers, 11½x9½x4½". For 117 VAC. Japan.
15 A 7495 X. Shpg. wt., 18 lbs. .99.95

TONYSONIC

8-track Pre-Recorded Tapes, see page 158

ALLIED
SERIES NO. 255
RECORDING TAPE

Allied® 255 Recording Tape . . fin quality at lowest possible prices lets you record more for less

Low as
56¢
3¼" reel

- Special oxide formula for good recordi
- High tensile strength prevents breaka
- Deep lubrication to reduce tape head we
- Resists temperature and humidity extrem
- Every reel guaranteed splice-free

Our lowest priced Allied recording tape. Tops for transcribing your valuable record collection, recording radio-TV broadcasts, classroom lectures, interviews, dictation. Make a permanent record of children's voices, parties, weddings, discussions or family fun, at the lowest prices possible. You can use your tape recorder more and save money besides.

Splice-free tape has a specially developed oxide formu assure excellent fidelity from any good recorder. High te strength virtually eliminates tape breakage. Deep lub tion protects tape and tape recorder heads. Uniform se tivity throughout permits smooth response. One 120 length of tape on a 7-inch reel plays up to 8 hours at 1⅞

Stock No.	Reel Size	Length in Feet	Applications	Mil	Base Material	Wt., Lbs.	EACH		
							1-11	12-24	25-
15 A 8275	3¼"	375	Dictation and Voice Letters	1.0	Acetate	½	.69	.59	
15 A 8276	5"	900	Dictation, Voice, Letters, Lectures	1.0	Acetate	¾	.84	.76	
15 A 8277	7"	1200	Family, Children's Voices, Duplicating LP's	1.5	Acetate	1½	.99	.94	
15 A 8278	7"	1800	Radio-TV Broadcasts, Duplicating LP's	1.0	Acetate	1½	1.59	1.43	1.
15 A 8279	7"	2400	Extra-Long Broadcasts, Concerts, Symphonies	0.5	Polyester	2	2.99	2.69	2.

Save $5.95 on Allied's special Tape Case Bonus offer

BUY 10 REELS OF TAPE AND GET TAPE CASE FOR $1 MORE

Special Allied bonus. Deluxe 10-reel carrying case, worth, $6.95, for just $1.00 when you purchase 10 reels of Allied 255 recording tape (described above). Sturdy, wooden, hinged-top case is covered and lined in blue and white leatherette. Has strong plastic handle fastened to lid for complete portability, plus secure metal latch. Stock up on tapes now, store and protect them in this useful case.

15 A 0168 X. Ten 1200-ft. Reels of Allied Recording Tape and Case. 18 lbs. 1

15 A 0167 X. Ten 1800-ft. Reels of Allied Recording Tape and Case. 18 lbs. 1

15 A 0166 X. Ten 2400-ft. Reels of Allied Recording Tape and Case. 23 lbs. 3

15 A 8057. Case Alone. Leatherette cov wood. 8x8x8". Shpg. wt., 3 lbs. . . . .

9⁹⁵

Robins low-cost Tape Care Kit

Essential for better recordings and tape recorder maintenance. Low-cost outfit includes: "Cut-N-Splice" splicer; tape recorder head and guide cleaner kit, and lubricant; splicing tape; 7" take-up reel; 75 tape clips; 1200-ft. reel 1.5 mil recording tape; 6 tape storage boxes. In compact attache case, 3¼x16x11".

15 A 8088. Shpg. wt., 5½ lbs. 9.95

19⁹⁵

Robins deluxe Tape Care Kit

Advanced outfit for the serious recordist. Contains "Junior" tape splicer; recorder head and guide cleaner kit, and lubricant; head demagnitizer; 75 tape clips; splicing tape; 7" takeup reel; color-coding title labels; book on tape splicing; three 1200-ft. reels 1.5 mil tape; 4 tape storage boxes. Attache case, 3¼x16x11".

15 A 8089. Shpg. wt., 7 lbs. 19.95

29

Robins complete Tape Care

Professional outfit with the f accessories. Includes: bulk tape er head demagnitizer; "Junior" splicer; 1200-ft. reel 1.5 mil recor tape; recorder head and guide cle kit with lubricant; splicing tape tape clips; 7" take-up reel; 2 storage boxes. Handsome, du attache case, 3¼x18½x13¾".

15 A 8443 X. Shpg. wt., 10 lbs. . .

ed 260 Recording Tape guaranteed high quality full-fidelity sound m any good recorder

*all-purpose recording tape manufactured
nest materials—offers flawless performance,
nal strength, full response, and long life*

ALLIED
260
RECORDING TAPE
HIGH FIDELITY | POLYESTER BASE
1 MIL - 50% MORE PLAYING TIME

cially processed for outstanding cording and listening pleasure

ed to provide consistently fine sound quality, Allied's 260 tape lets you
with confidence at low cost. Manufactured to meet Allied's specifications.
e is absolutely free of such microscopic irregularities as skew, edge burrs,
ng and curling. Excellent for transcribing from pre-recorded tapes, record
, taping off-the-air stereo broadcasts, and many other general-purpose uses.

uous length, splice free tape has exceptional strength and resistance to
e temperature and humidity conditions. A special, deep lubrication is
to assure long tape life and to prevent oxide build-up on recorder heads.
s the intimate recorder head contact essential to full-range fidelity with-
essive head wear. Fine oxide coating assures superb recording fidelity and
gnal-to-noise ratio.

lied 260 tape meets the highest standards of recording quality demanded
-fidelity perfectionists. Full frequency response, low noise level, high
vity and uniform output. For the serious, quality-conscious recordist—
er general-purpose recording tape offers so many features at such low
hatever your tape needs, Allied provides the greatest selection of the
ecording tape at minimum expense.

ock o.	Reel Size (Inches)	Length (Feet)	Mil	Base	Wt., Lbs.	EACH 1-11	 12-24	 25-Up
8740	3¼	600	0.5	Polyester	½	.89	.79	.69
8741	5	900	1.0	Polyester	¾	1.37	1.24	1.12
8742	7	1200	1.5	Acetate	1	1.49	1.34	1.19
8743	7	1800	1.0	Polyester	1¼	2.14	1.93	1.75
8744	7	2400	0.5	Tensilized Polyester	1	3.49	3.14	2.86
8745	7	3600	0.5	Tensilized Polyester	1	4.98	4.49	3.99

Outstanding features for best recordings

- Extra tensile strength to avoid tape breakage
- Deep lubrication to prevent oxide build-up, assure long tape life
- Resistant to moisture, temperature extremes
- High sensitivity, low noise level, and full frequency response
- Each reel splice-free for uniform quality

ave $5.95 on Allied's special Tape Case Offer!

STOCK-UP ON TAPE NOW AND SAVE!

Allied offer! Deluxe 10-
rrying case worth $6.95
t $1.00 when you pur-
10 reels of Allied 260
escribed above. Sturdy
hinged-top case is cov-
d lined in blue and white
ette. Has strong plastic
fastened to top of lid
ure metal latch for com-
ortability. Stock up on
ow, store and protect
this useful case.

15 A 0169 X. Ten 1200-ft. reels with Case. Wt., 13 lbs. . . . 15.90

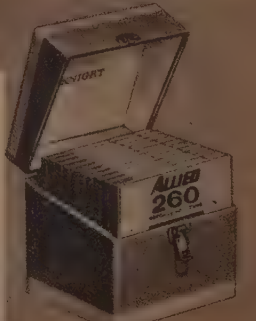
15 A 0170 X. Ten 1800-ft. reels with Case. Wt., 15½ lbs. . . 22.40

15 A 0171 X. Ten 2400-ft. reels with Case. Wt., 13 lbs. . . . 35.90

15 A 0172 X. Ten 3600-ft. reels with Case. Wt., 15 lbs. . . . 50.80

15 A 8057. Case Alone. 10-reel tape case. 8x8x8". 3 lbs. . . 6.95

Buy 10 Reels of Tape, Get Case for only $1 more



ALLIED
265
ULTRA RANGE
RECORDING TAPE
Full spectrum formula
for master recording
ALLIED RADIO CORPORATION · CHICAGO ILL.

Allied® 265 . . our very best ultra range full-spectrum professional Recording Tape with extra deluxe features

Allied's best tape. Studio-quality for finest profession recordings. Manufactured to Allied's specifications, it' the first choice of audiophiles and high-fidelity perfection ists. Designed for maximum frequency response. Lubricate to provide longer wear plus giving added protection to tap recorder heads. Contains only first-quality materials an is guaranteed splice-free.

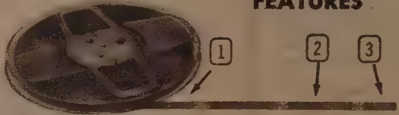
- Special micro-polishing process and homogenized lubrication reduces wear
- Latest binder system assures full fidelity and prevents oxide peeling or flaking
- Precision wound on computer-type 7-inch reel

A remarkable, versatile tape that's priced for top valu Allied Ultra Range recording tape gives you features an quality that meet the requirements of the most critica recording connoisseur. A specially developed micro-polishing process cuts tape abrasion to a minimum; helps reduc wear on your tape recorder heads. Built-in homogeniz lubrication helps reduce the possibility of oxide peeling o flaking. Wound on heavy-duty, heat-treated 7" computer-type reel. Each reel comes with a book of silicone-impregnated rayon tape-cleaning pads that help to extend tap and head life.

Polyester leaders are attached to each end of the tape; re at one end, green at the other. Ultra-thin bonded sensin foils at each end of the reel actuate recorders equipped wit automatic reverse mechanism. A length of head cleanin tape is spliced into one end of every reel of tape to help remove accumulated material from recorder heads. Has th latest binder system. 1½-mil acetate tape is recommende for taping parties, home recordings, dictation; 1-mil polyester for taping stereo LP's or for recording either live o from a tuner; ½-mil polyester for making extra-long recordings from a single reel.

Stock No.	Length (Feet)	Base	Wt., Lbs.	EACH 1-11	12-24	25-U
15 A 8269	1275	1½-mil Acetate	1	2.09	1.88	1.67
15 A 8270	1875	1-mil Polyester	1	3.19	2.97	2.65
15 A 8271	2475	½-mil Polyester	1½	4.60	4.14	3.89

LOOK AT THESE IMPORTANT FEATURES



1. Head-cleaning tape spliced to end of reel
2. Sensing foil at each end of tape actuates recorder with reverse mechanism
3. Color-coded leader at each end of tape

Book of silicone tape cleaning pads with each reel

Heavy-duty computer-type reel is heat treated to prevent warping

Save $5.95 on special Tape Case Bonus Offer

Buy 10 reels of Tape, get Case for only $1 more

Deluxe 265 Tape with Carrying Case

Special savings on 10-reel carrying case! Buy 10 reels of deluxe 265 recording tape (above). You get the savings of buying at low prices, plus a sturdy wooden tape carrying case (separately at right), to store, protect and transport tapes, for only $1 more. Gives you up to 24,750 feet of tape on specially developed warp-resistant reels. Up to 80 hours recording time.

15 A 0179 X. Ten 1275-Ft. Ree with Case. Wt., 12½ lbs. . . 21.9

15 A 0180 X. Ten 1875-Ft. Ree with Case. Wt., 15 lbs. 32.9

15 A 0181 X. Ten2 475-Ft. Ree with Case. Wt., 17½ lbs. . . 47.0

15 A 8057. Case Alone. Handsome blue and white leatherette over sturdy wood. Plasti carry handle; inside cover and lined. Size, 8x8x8". Shp wt., 3 lbs. 6.9

Buy with no money down . . full Credit details on page 43

1¢ BONUS PACKAGE

TEN ALLIED CASSETTES PLUS TAPE BUTLER

Save 6.94

Low as 17^{91}

Take advantage of this special offer and *save $6.94.* Buy package of 10 :op-quality Allied cassettes in 60-ninute, 90-minute, or 120-minute .engths (described at right) and get :he versatile, handy Tape Butler worth $6.95 (described below) for only 1¢ more.

Pkg. of 10: C-60. Records up to 10 hours. Includes Tape Butler bonus. Shpg. wt., 7½ lbs.
15 A 0102 L2X..................17.91

Pkg. of 10: C-90. Records up to 15 hours. Includes Tape Butler bonus. Shpg. wt., 10 lbs.
5 A 0103 L2X..................26.91

Pkg. of 10: C-120. Records up to 20 hours. Includes Tape Butler bonus. Shpg. wt., 12½ lbs.
5 A 0104 L2X..................36 51

Allied full-frequency blank Tape Cassettes . . super-coated

Top-quality tape with "pop-in" playing convenience

Low as 88¢

- **Deep lubrication protects recorder heads**
- **Offer excellent response with uniform output level**

Allied's recording tape cassettes offer quality on a par with the best reel-type recording tape. *Plus*, all the added convenience of "pop-in" and play. Made to our rigid specifications for your assurance of finest results. Deep lubrication preserves tape life and protects precision-made tape recorder heads. Reduced friction gives instant start at normal operating speed and smooth operation throughout recording and playback. Super-coated for superior signal to noise ratio. Excellent frequency response, uniform output. Moisture and heat resistant. Made on finest polyester base; strong, resilient, free from microscopic defects. Packaged in self-mailing boxes. Compatible with all recorders using cassette tape system.

Type C-30 Blank Tape Cassette. Records up to 30 minutes. Wt., ¼ lb.
15 A 8000. 1-11..........Each 98¢ 12-Up..................Each 88¢

Type C-60 Blank Tape Cassette. Records up to 60 minutes. Wt., ½ lb.
15 A 8001. 1-11..........Each 1.79 12-Up..................Each 1.61

Type C-90 Blank Tape Cassette. Records up to 90 minutes. Wt., ¾ lb.
15 A 8002. 1-11..........Each 2.69 12-Up..................Each 2.42

Type C-120 Blank Tape Cassette. Records up to 120 minutes. Wt., 1 lb.
15 A 8003. 1-11..........Each 3.65 12-Up..................Each 3.28

Economy blank Tape Cassettes—record up to 120 minutes

omy cassettes for low-cost record-f radio and TV programs, dicta- interviews, discussions. Feature ole-free, non-jamming design and quality recording tape. Deep cation protects tape recorder s from excessive wear. No-bind ruction permits instant-start, th operation. Tape is free from oscopic defects such as edge burr, ered edges, cupping and curling. ise on any cassette tape recorder ding: Allied 1100 and 1150; Aiwa Ampex "Micro" Series; Concord F-100, F-103, F-105; Norelco 150; Wollensak 4100 and 4200; many more. Available below in 60-minute, 90-minute, and 120-minute lengths.

Type C-60 Cassette. Recording time: up to 60-minutes. Wt., ½ lbs.
15 A 8272..........................1.25

Type C-90 Cassette. Recording Time: up to 90-minutes. Wt., ¾ lbs.
15 A 8273..........................1.89

Type C-120 Cassette. Recording Time: up to 120-minutes. Wt., 1 lb.
15 A 8274..........................2.39

- **Non-jamming**
- **No-bind construction**
- **Easy instant-start**

rganize and protect your cassettes with handy auto/home Tape Butler

lds up to 36 tape cassettes
ap-fast lids • Cushioned base

6^{95}

ect your stereo tape cartridges and cassettes temperature extremes and physical dam- Tape Butler holds 36 cassettes or twelve 4 track cartridges. Requires no special instal-1. Easel mounting and 5-position adjust-fits all cars, foreign and domestic. Installs nsoles, rear hump, top of front seat. Cush-l foam base permits use in home or office, on polished surfaces. Durable high-impact with black leather-grain finish. Size, 10½x 8¼". Shpg. wt., 2½ lbs.
8055 X..........................6.95

Snap-fast lids open wide for full exposure of tapes and fingertip selection

tape carrier

"Scotch" professional audio magnetic Recording Tape

- Continuous length, guaranteed splice-free recording tape
- Deep-lubricated for minimum recorder head wear
- Full frequency response and high signal-to-noise ratio

Sensitive "Dynarange" Series Tape

Choice of professionals. So sensitive it lets you use slow speeds without fidelity loss. 15% longer life; low noise; good hi-frequency response, low rub-off. Superior signal/noise ratio—ideal for transcribing from pre-recorded tapes and records. Polyester, except †acetate. Av. wt., 1 lb.

Stock No.	Type	Base	Feet	Reel	1-11, EA.	12-Up, EA.
15 A 8535	201-6	1½-mil†	600	5"	1.95	1.75
15 A 8504	201-12	1½-mil†	1200	7"	2.99	2.69
15 A 8536	202-6	1½-mil	600	5"	1.99	1.79
15 A 8537	202-12	1½-mil	1200	7"	3.40	3.06
15 A 8538	203-9	1-mil	900	5"	2.83	2.55
15 A 8505	203-18	1-mil	1800	7"	4.90	4.41

111 Standard 1½-mil Acetate Tape

For all general recording. International standard of the recording industry—provides flawless sound reproduction at low cost. Silicone lubricated to protect heads. *NAB-type alum. reels with 3" center hole. Av. wt., 8 oz.

Stock No.	Type	Feet	Reel	1-11, EA.	12-Up, EA.
15 A 8542	111-1.5	150	3"	.52	.47
15 A 8543	111-3	300	4"	1.35	1.21
15 A 8547	111-6	600	5"	1.69	1.52
15 A 8548	111-12	1200	7"	2.59	2.33
15 A 8549	111-25RO*	2500	10½"	7.20	6.48

150 Extra-length 1-mil Polyester Tape

50% more playing time plus extra-strong base. Withstands temperature, humidity extremes. *NAB-type alum. reels with 3" center hole. High-potency oxide. Av. wt., 12 oz.

Stock No.	Type	Feet	Reel	1-11, EA.	12-Up EA.
15 A 8531	150-9	900	5"	2.29	2.06
15 A 8532	150-18	1800	7"	3.99	3.59
15 A 8533	150-36RO*	3600	10½"	9.57	8.61

290 Triple-length ½-mil Polyester Tensilized Tape

Extra thin, stretch and break-resistant tape gives more playing time at a minimum cost per foot. For all general recording uses. Shpg. wt., 5" reel, 8 oz.; 7" reel, 1½ lbs.

Stock No.	Type	Feet	Reel	1-11, EA.	12-Up, EA.
15 A 8304	290-18	1800	5"	4.69	4.22
15 A 8545	290-36	3600	7"	7.99	7.19

200 Double-length ½-mil Tensilized Polyester

100% more time—as much as two reels standard tape. Super-strong and stretch resistant. High-potency oxide. Av. shpg. wt., 12 oz.

15 A 8500	200-12	1200	5"	3.69	3.32
15 A 8541	200-24	2400	7"	6.49	5.84

131 low-print-through 1½-mil Acetate Tape

Reduces print-through to a point below the noise level of most professional machines. Allows long storage. *NAB-type alum. reels with 3" center hole. Av. shpg. wt., 12 oz.

Stock No.	Type	Feet	Reel	1-11, EA.	12-Up, EA.
15 A 8313	131-6	600	5"	1.87	1.68
15 A 8534	131-12	1200	7"	2.93	2.64
15 A 8540	131-25RO*	2500	10½"	8.14	7.32

120 high-output 1½-mil Acetate Tape

Over 100% higher output level than standard tape for greater dynamic range and freedom from distortion on signal peaks. For sensitive recording applications. On plastic reels. Av. shpg. wt., 10 oz.

Stock No.	Type	Feet	Reel	1-11, EA.	12-Up, EA.
15 A 8312	120-6	600	5"	1.69	1.52
15 A 8554	120-12	1200	7"	2.59	2.33

175 heavy-duty 1½-mil "Tenzar"

Longer-wearing tape shrugs off hard use, rough handli . . lasts many times longer than ordinary tape. Made wi same wear-resistant high-potency oxide coating prov durable in heavy-duty tapes for high-speed compute Fights heat, won't dry out in storage nor absorb a moisture; doesn't tear if edges become nicked. Spec **color: Clear, Red, Blue, Green or Yellow.** Av. shpg. wt., 10

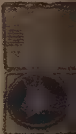
Stock No.	Size	Feet	1-11, EA.	12-Up, E
15 A 8315 C	5"	600	1.60	1.44
15 A 8316 C	7"	1200	2.50	2.25

190 extra-length 1-mil Acetate Tape

50% more tape—as much recording time as 1½ stand reels. High-potency oxide for purity of sound. Av. wt., 12

Stock No.	Type	Feet	Reel	1-11, EA.	12-Up, E
15 A 8550	190-9	900	5"	2.29	2.06
15 A 8552	190-18	1800	7"	3.99	3.56

"Living Letters" Tape with plastic mailing container



Newest way to send personal notes. Plastic container meets postal regulations as mailer. Hinge, snap closer. †Tensilized. Shpg. wt., 4 oz.

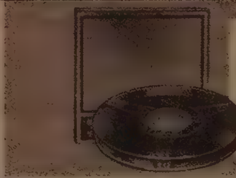
Stock No.	Base	Feet	1-11, EA.	12-Up,
15 A 8300	1½-mil Acetate	150	.69	.6
15 A 8301	½-mil Polyester†	300	1.39	1.2
15 A 8302	½-mil Polyester†	600	1.99	1.7
15 A 8303	Mailer w/empty 3" reel	. . .	.40	.3

15 A 8501. #11 Address Labels. . . . . Pkg. of 10 for

Tape Cassettes for all cassette recorders

Standard tape cassettes for all casse recorders. Feature high strength, wi frequency response, and high signal- noise ratio. Type 271 comes in mailer b others, plastic display album box. †R cording time, both directions. Shpg. w 3 oz.

Stock No.	Type	Feet	†Minutes	1-11, EA.	12-Up, E
15 A 8309	271	150	30	1.75	1.58
15 A 8311	271	300	60	2.05	1.85
15 A 8314	272	450	90	2.95	2.65
15 A 8310	273	600	120	3.95	3.56



"SCOTCH" Video Recording Tape

Helical-scan tape, precision made for superior signal- noise ratio and long life. Low-noise oxide for clear pictu sharp contrast. Type 351 is for Sony, Concord and Pa sonic recorders, on 7" plastic self-threading reel in bo style box. Type 357 is for Ampex VR7000 and VR60 on 9¾" phenolic hub with riveted alum. flanges. *Minut Shpg. wt.: ½-hour tape, 1 lb.; 1-hour, 1½ lbs.

Stock No.	Type	Feet	Dia.	Width	*Min.	1-9, EA.	10-24,
15 A 8320	351	1250	7"	½"	32	21.95	20.8
15 A 8319	351	2400	7"	½"	64	39.95	37.9
15 A 8318	357	1500	9"	1"	31	44.95	42.7
15 A 8317	357	3000	9"	1"	62	59.95	56.9

complete Tape selection
r every recording need

ins Correspondence Tape

uality recording tape with im-sistant plastic mailer and two-ddress card. Mailer meets all requirements. 3" reels except **Material: A-Acetate; P-Polyester; yester Triple Play. 6 oz.**

No.	Type	Feet	Base	Time (7½ips)	EACH
183	15H3	150	1.5 mil. A	7½ Min.	.59
184	10H3	225	1. mil. A	11 Min.	.75
185	10H3M	225	1. mil. P	11 Min.	.87
186	5H3MT	300	.5 mil. P	15 Min.	1.05
187	5H3MTS	450	.5 mil. PTP	22½ Min.	1.59
188	5H32MTS	*600	.5 mil. PTP	30 Min.	1.89

ıs quadruple-play ¼-mil Tape

an get up to 32 hours recording ı this high quality ¼ mil tensilized for extra strength. Good frequency -se for sharp, bright recordings. ıs recording time of recorders. *At ɜ. Shpg. wt., 6 oz.

:k	Type No.	Reel	Feet	*Time	EACH
196	3C25MT	2½"	500	3 hrs. 20 min.	1.49
197	3C32MT	3¼"	1100	7 hrs. 20 min.	2.97
198	3D5MT	5"	2400	16 hrs.	5.89
199	3D7MT	7"	4800	32 hrs.	11.25

8-track blank
cording Tape Cartridges

igh signal-to-noise ratio
xtra-strong polyester base
ıbricated to cut wear on heads

, blank tape cartridges for 8-track cartridge record-ntain high-strength polyester tape. Uniform oxide ; for wide-response, high signal-to-noise ratio, out-ıg recording results. Lubricated to reduce wear on ecorder heads. Shpg. wt., 3 oz.

tock No.	Playing Time	EACH		
		1-5	6-11	12-Up
8644	64 minutes	1.98	1.79	1.49
8645	32 minutes	1.69	1.49	1.29

Scotch Taping Accessories

4 Leaders & Timing Tape. 100'. 15 C 8569 is white; 568, yellow. Dispenser package. Wt., 3 oz.
569. 12-Up .... Each .54   1-11 .... Each .60
568. 12-Up .... Each .54   1-11 .... Each .60

1-10. Leader Tape. White. 1000'. 7" reel. Wt., 8 oz.
546. 12-Up .... Each 2.70   1-11 .... Each 3.00

557. Type 41½-S Splicing Tape. Non-run adhesive on le. ½x150". Dispenser pkg. Wt., 3 oz. .... **Each .39**

577. Type 51-½-S. Aluminized Sensing Tape. For ers with automatic "stop" and "reverse" controls. ive on one side, foil on other. 150" reel. In handy ser package. Shpg. wt., 3 oz. .... **Each 1.89**

Type PRST-7

otch self-threading Tape Reel

ıates tedious reel threading. Place ape or leader on reel hub and let er do the rest. 7" plastic reel with ight collar. Seals out dust, makes lf-storing without box. Wt., 8 oz.
014. 12-Up. Each .90   1-11. Each 1.00

cotch empty Plastic Reels with Index box

ard reels in most frequently used sizes. Av. wt., 4 oz.

No.	Reel Size	1-11, EACH	12-Up, EACH
3559	3"	.17	.15
558	5"	.44	.39
556	7"	.50	.45

BASF extra-strength deluxe Recording Tape for full-range sound

- Luvitherm® or Polyester
- Prestressed
- High response
- Not affected by humidity
- No rub-off
- No print-thru
- Colored leaders
- Auto-stop foil

Packed in Plastic Library Box

Has Inner Box and Index

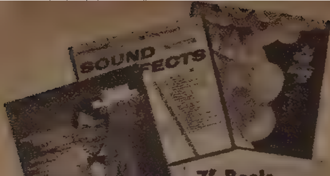
Luvitherm unplasticized polyvinyl chloride film or polyester base. Prestressed for exceptional strength and dimensional stability. Luvitherm types are unaffected by humidity and temperature variations, and are extremely supple for superior tape-to-head compliance. Excellent frequency response. Mirror finish—no drop outs, no rub off. No print through. Automatic stop switch foil. Colored leader tape on each end. Packaged in plastic library storage container. Imported.

Stock No.	Feet	Reel	Shpg. Wt.,	EACH	
				1-10	11-Up
1½-mil Luvitherm Tape (Standard Play)					
15 A 8816	600	5"	10 oz.	1.79	1.59
15 A 8817	1200	7"	1 lb.	2.69	2.39
1-mil Luvitherm Tape (Long Play)					
15 A 8818	900	5"	9 oz.	2.39	2.09
15 A 8819	1800	7"	18 oz.	3.89	3.49
¾-mil Luvitherm Tape (Double Play)					
15 A 8820	300	3"	3 oz.	1.29	1.19
15 A 8821	1200	5"	10 oz.	3.49	3.09
15 A 8822	2400	7"	18 oz.	5.59	4.99
1-mil Polyester Tape (Long Play)					
15 A 8823	1800	7"	1 lb.	4.79	4.29
½-mil Polyester Tape (Triple Play)					
15 A 8824	1800	5"	10 oz.	5.49	4.89
15 A 8840	3600	7"	19 oz.	8.49	7.49

BASF Cassettes in mailer box

Standard cassettes with new low-noise high-quality tape. Full response, high signal-noise ratio. In plastic library/mailer box.

Stock No.	Type No.	Time	Wt., Oz.	EACH	
				1-12	13-Up
15 A 8841	C-60	60 minutes	4	2.21	1.85
15 A 8842	C-90	90 minutes	4	3.64	3.05
15 A 8843	C-120	120 minutes	5	4.48	3.75



7" Reels

Big selection of pre-recorded Stereo Tapes and Cassettes by popular recording artists

The best of Recordings on standard 4-track 7" reels

Cassettes

INSTRUMENTALS—EASY LISTENING

Stock No.	Title	Artist	EA.
15A 8004 S	*Dance Beat	Popular Favorite	6.78
15A 8005 S	*Broadway Music	Popular Favorite	6.78
15A 8006 S	*Moods	Popular Favorite	6.78
15A 8013 S	*Moods 2	Popular Favorite	6.78
15A 8016 S	Phase 4 Concert Sampler	Popular Favorite	6.78
15A 8017 S	Phase 4 Stereo Sampler	Popular Favorite	6.78
15A 8595 S	Phase 4 Popular Music Sampler	Popular Favorite	6.78
15A 8024 S	Gems Forever	Mantovani	5.93
15A 8025 S	Golden Hits	Mantovani	6.78
15A 8026 S	The Mantovani Touch	Mantovani	6.78
15A 8027 S	The Sound of Boots	Boots Randolph	5.18
15A 8028 S	Bloomin' Hits	Paul Mauriat	6.78
15A 8029 S	Mystic Moods of Love	Mystic Moods Orchestra	6.78
15A 8034 S	Prevailing Airs	Paul Mauriat	6.78
15A 8037 S	Scarborough Fair	Andre Kostelanetz	5.93
15A 8039 S	*Academy Award Songs	Henry Mancini	8.59
15A 8695 S	*Concert Sound—Encore/More Concert	Henry Mancini	8.59
15A 8043 S	Special Request	Jackie Gleason	5.93
15A 8044 S	Whipped Cream and Others	Tijuana Brass	6.78
15A 8045 S	Going Places	Tijuana Brass	6.78
15A 8075 S	Memories	Mantovani	6.78
15A 8076 S	Rhapsodies for Young Lovers	Midnight String Quartet	6.78
15A 8091 S	Love Rhapsodies	Midnight String Quartet	6.78
15A 8098 S	Nashville Saxophones	Billy Vaughn	6.78
15A 8099 S	Memories	Lawrence Welk	6.78
15A 8731 S	Brazil '66	Sergio Mendes	6.78
15A 8106 S	Reach Out	Bert Bacharach	6.78
15A 8110 S	Fool on a Hill	Sergio Mendes	6.78
15A 8112 S	Beat of the Brass	Tijuana Brass	6.78
15A 8115 S	Do You Know the Way to San Jose	Baja Marimba	6.78
15A 8117 S	Best of Wes Montgomery	Wes Montgomery	6.78
15A 8119 S	Livin It Up	Jimmy Smith	6.78
15A 8121 S	Road Song	Wes Montgomery	6.78

CLASSICAL

Stock No.	Title	Artist	EA.
15A 8123 S	Beethoven Symphony #3	Van Karajan	6.78
15A 8129 S	Beethoven Symphony #4 & 5	Van Karajan	7.63
15A 8132 S	Beethoven Symphony #2 & 6	Van Karajan	7.63
15A 8133 S	Beethoven Symphony #1 & 7	Van Karajan	7.63
15A 8137 S	*Beethoven Symphony #8 & 9	Van Karajan	10.39
15A 8138 S	*Brahms Symphony #1 & 2	Van Karajan	10.39
15A 8139 S	*Brahms Symphony #3 & 4	Van Karajan	10.39
15A 8162 S	Tchaikovsky Symphony #5	Van Karajan	6.78
15A 8163 S	Tchaikovsky/1812/Nutcracker	London Festival Orch. (Sharples)	6.78
15A 8171 S	Gershwin/Rhapsody in Blue/ American in Paris	London Festival Orch. (Black)	6.78
15A 8182 S	Switched on Bach	Carlos/Folkman	6.78
15 A 8335 S	Nine Beethoven Symphonies	London Symph. Krips	18.95
15A 8191 S	Mahler #9	L. Bernstein	10.39

VOCALS

Stock No.	Title	Artist	E
15A 8201 S	Promises, Promises	Dionne Warwick	5.
15A 8215 S	Late Again	Peter, Paul & Mary	6.
15A 8230 S	Sinatra's Greatest Hits	Frank Sinatra	7.
15A 8237 S	Gentle on My Mind	Dean Martin	6.
15A 8240 S	*Who Will Answer/More I Cannot Wish You	Ed Ames	8.
15A 8250 S	Gentle on My Mind	Glen Campbell	5.
15A 8257 S	Wichita Lineman	Glen Campbell	5.
15A 8258 S	Galveston	Glen Campbell	5.
15A 8259 S	A Happening in Central Park	Barbra Streisand	5.
15A 8260 S	Valley of the Dolls	Dionne Warwick	5.
15A 8261 S	Greatest Hits Vol. I	Dean Martin	6.
15A 8264 S	Help Yourself	Tom Jones	5.
15A 8265 S	Goin' Out of My Head	The Lettermen	5.
15A 8266 S	Live	Tom Jones	5.

SOUND EFFECTS

15A 8267 S	Sound Effects in Super Stereo. Vol. 3	Miscellaneous Effects	6.
15A 8268 S	*Sound Effects in Super Stereo Vol. 4	USAF Airpower Aboard Carrier Enterprise	8.
15A 8305 S	Sound in the 8th Dimension	Miscellaneous Effects	6.

SOUNDTRACKS

15A 8306 S	Hair	Original Cast	7.
15A 8308 S	Sound of Music	Original Track	8.
15A 8401 S	Funny Girl	Original Track	8.
15A 8402 S	Finian's Rainbow	Original Track	7.
15A 8403 S	Music of Mission Impossible	Lalo Schiffrin	6.
15A 8404 S	Man of La Mancha	Original Cast	7.
15A 8405 S	Dr. Zhivago	Original Track	6.
15A 8409 S	Space Odyssey 2001	Original Track	7.
15A 8410 S	Camelot	Original Track	7.

TEEN FAVORITES

15A 8414 S	Beggars Banquet	Rolling Stones	5.
15A 8478 S	TCB	Supremes & Temptations	5.
15A 8497 S	*The Beatles	The Beatles	10.
15A 8551 S	Yellow Submarine	The Beatles	5.
15A 8555 S	Greatest Hits	The Association	6.
15A 8560 S	Ball	Iron Butterfly	5.
15A 8660 S	*Odessa	Bee Gees	8.
15A 8576 S	In-A-Gadda-Da-Vida	Iron Butterfly	5.
15A 8588 S	Greatest Hits	Rascals	6.
15A 8591 S	Blood Sweat & Tears	Blood Sweat & Tears	5.
15A 8593 S	Goodbye	Cream	5.
15A 8594 S	Parsley, Sage, Rosemary & Thyme	Simon & Garfunkel	5.

Popular Stereo Albums pre-recorded on compact Tape Cassettes

INSTRUMENTALS—EASY LISTENING

Stock No.	Title	Artist	EA.
15A 8444 S	Phase IV Stereo Sampler	Various Artists	5.93
15A 8511 S	Golden Hits	Mantovani	5.39
15A 8445 S	The Mantovani Sound	Mantovani	5.39
15A 8447 S	The Sound of Boots	Boots Randolph	5.39
15A 8448 S	Bloomin' Hits	Paul Mauriat	5.39
15A 8449 S	Mauriat Magic	Paul Mauriat	5.39
15A 8502 S	Whipped Cream & Others	Tijuana Brass	5.39
15A 8503 S	Going Places	Tijuana Brass	5.39
15A 8507 S	Brazil '66	Sergio Mendes	5.39
15A 8508 S	Reach Out	Burt Bacharach	5.39
15A 8515 S	Fool on a Hill	Sergio Mendes	5.39
15A 8516 S	Beat of the Brass	Tijuana Brass	5.39
15A 8519 S	A Day in the Life	Wes Montgomery	5.39
15A 8524 S	Down Here on the Ground	Wes Montgomery	5.39

JAZZ

15A 8526 S	Best of Wes Montgomery	Wes Montgomery	5.39
15A 5829 S	Livin' It Up	Jimmy Smith	5.39

CLASSICAL

15A 8530 S	Tchaikovsky/1812 Overture/ Nutcracker	London Festival Orch. (Sharples)	5.39
15A 8544 S	Gershwin/Rhapsody in Blue/ American in Paris	London Festival Orch. (Black)	5.39

VOCALS

Stock No.	Title	Artist	E
15A 8617 S	Greatest Hits Vol. I	Dean Martin	5.
15A 8618 S	Galveston	Glen Campbell	5.
15A 8620 S	The Sea	Anita Kerr & The San Sebastian Strings	5.

SOUNDTRACKS

15A 8621 S	Man of La Mancha	Original Cast	6.
15A 8513 S	Dr. Zhivago	Original Track	6.
15A 8623 S	Space Odyssey 2001	Original Track	6.
15A 8624 S	Finian's Rainbow	Original Track	6.

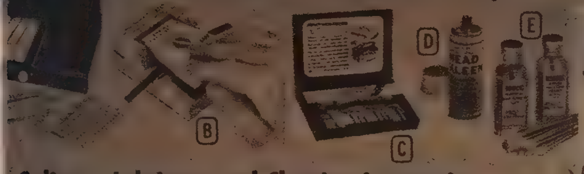
POPULAR

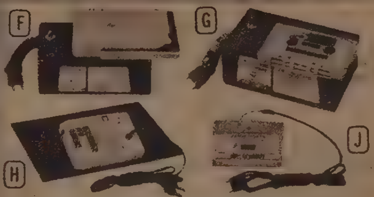
15A 8641 S	In-A-Gadda-Da-Vida	Iron Butterfly	5.
15A 8642 S	*Beatles	The Beatles	10.
15A 8643 S	The Second	Steppenwolf	5.
15A 8646 S	Wheels of Fire Vol. II (Live!)	Cream	5.
15A 8647 S	Soul '69	Aretha Franklin	5.
15A 8648 S	Freedom Suite P.F.II	The Rascals	5.
15A 8649 S	The Rascals' Greatest Hits/Time Peace	The Rascals	5.
15A 8656 S	Bayou Country	Creedence Clearwater Revival	5.
15A 8658 S	Lovin' Things	Grassroots	5.
15A 8668 S	TCB	Supremes/Temptations	5.
15A 8669 S	Wichita Lineman	Glen Campbell	5.

*Indicates twin-pack, equal to two LP's

Buy your tapes with no money down... Credit details on page 43

Robins Cassette/8-Track Accessories





Splicers, Lubricants and Cleaning Accessories

-1 Cassette Maintenance and age Case. Holds 10 cassettes. ıead demagnetizer, three- ad clean and tape test, 240 ›ded index spots, log book. 25. Wt., 1¼ lbs. 9.98

15 Cassette Tape Splicer. ıt-N-Splice" economy Cuts at 45° angle. Includes -sticking splicing patches. 35. Wt., 5 oz. 2.99

15 Cassette Tape Splicing ε. Edits and repairs .150" Strips in sound effects and s. Cuts at 45° or 90° angle. case, cutting blade, and 25 ; patches. 40. Wt., 5 oz. 5.98

D THS-1 Head-Kleen Spray. 4-oz. of cleaning formula in a convenient aerosol container remove oxide and grime from cassette and cartridge heads. Has extension nozzle for hard-to-reach heads. 15 A 8760. Wt., 6 oz. 1.25

Type TT-15 Tape Splicing Patches. (Not illus.) 100 pre-cut patches. 15 A 8145. Wt., 2 oz. . . . . 99¢

E TK-3 Cassette and Cartridge Head-Kleen Kit. 2 oz. bottles of head cleaner and head and guide lubricant. 25 extra-long swabs for cleaning and lubricating hard-to-reach parts of equipment for greatly improved tape fidelity. 15 A 8146. Wt., 8 oz. 1.49

Cassette and 8-Track Erasers

F TMC-2 Cartridge Eraser. Restores tape in seconds. For 117 VAC. 15 A 8149. Shpg. wt., 5½ lbs. 17.99

G TMC-1 Cassette Eraser. Erases bulk tape faster and better. For 117 VAC. 15 A 8150. Shpg. wt., 3 lbs. 11.99

TD-15 Auto Cartridge Demagnetizer. (Not illus.) Plugs into car cigarette lighter. 6-12 VDC. 15 A 8152. Shpg. wt., 1 lb. 9.98

H TD-12 Home Cartridge Demagnetizer. Restores tape to original quality. 117 VAC. 15 A 8155. Shpg. wt., 14 oz. 7.98

J TD-10 Cassette Demagnetizer. Has built-in pilot light. 110 V, 50-60 Hz AC. 15 A 8161. Shpg. wt., 8 oz. 4.98

Indexing, Mailing and Storage Accessories

.5 Cassette & Cartridge Color-e Kit. Catalog your tapes: 120- ıg book, 240 index spots in 2 20 self-stick title labels in 5 writing pen. 67. Wt., 1¼ lbs. 2.98

2 Plastic Cassette Dust Caps. 10 protect tape openings from rime and damage. 90. Wt., 4 oz. . . . . 79¢

ıbove, but for cartridges. 92. Wt., 5 oz. . . . . 79¢

18 Plastic Cassette Dust Pro-ırs. 20 clear plastic bags pro- ainst dust and grime. 93. Wt., 2 oz. . . . . 69¢

Above, but for cartridges. 94. Wt., 3 oz. . . . . 69¢

20 Cassette Color-Code Replace- Title Labels. Package of 20 n 5 basic colors. 95. Wt., 4 oz. . . . . 89¢

30 Cassette Owner-Identification els. 30 printed labels: "Property ______." Apply to cassette end ck identification. Color-coded. 02. Wt., 4 oz. . . . . 89¢

Deluxe Permanent-Storage Cas- Canisters. 3 break-resistant covers. See-thru cover for identification. Built-in stops t tape slack, unwinding. 38. Wt., 6 oz. . . . . 99¢

Reuseable Cassette Mailing Canis- Package of 3. Impact-resistant . Built-in tape stops. Self-stick s labels. 239. Wt., 8 oz. . . . . 79¢

Replacement Cassette Mailer (Not illus.) Package of 20 ck labels for addressing TC-4 her cassette mailers. 203. Wt., 4 oz. . . . . 69¢

-18 Cardboard Cassette Mailers. ready-to-address mailers. Stops t tape slack, unwinding. 235. Wt., 8 oz. . . . . 99¢

W TSA-12 Book-Type Cassette Storage Album. Holds 12 cassettes neatly in recessed compartments. 15 A 8204. Wt., 8 oz. 1.98

X TL-80 Cassette or Cartridge Index Spots. 240 self-stick spots, 2 sets, numbered 1-24 in 5 colors. Index tapes and matching canisters. 15 A 8206. Wt., 12 oz. . . . . 89¢

Y TCS-6 Modular Cassette Storage Unit. Holds 12 tapes. Mount on wall or place on bookshelf. Stand on end or stack. Walnut grain vinyl. 15 A 8209. Wt., 14 oz. 1.98

Z TSC-8. Above, but for cartridges. 15 A 8219. Wt., 1 lb. 2.98

AA TCC-6 Cassette Carrying & Storage Case. Holds 12 tapes. Log book. 15 A 8299. Wt., 12 oz. 3.89

Recorder "Tune-Up" Accessories

BB TCW-2 Cassette Tape Tension Winders. Pair. For taking-up slack. 15 A 8326. Wt., 1 oz. . . . . 89¢

CC TSC-9 Cassette Test Strobe. Built-in strobe tape and light, check recorder's speed. 110 VAC. 15 A 8327. Wt., 5 oz. 3.69

TSC-8 8-track Cartridge Test Strobe. (Not illus.) As above. 110 VAC. 15 A 8329. Wt., 7 oz. 4.49

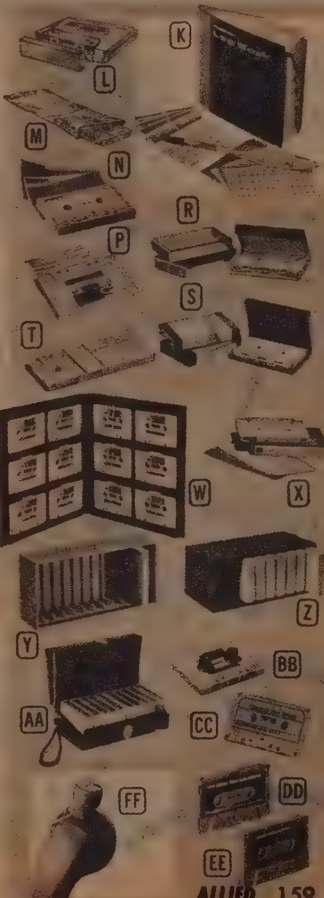
DD THC-6 3-way Combination "Test-N-Clean" Cassette. Cleans heads. Tests head alignment and balance. 15 A 8330. Wt., 2 oz. 1.69

THC-8 3-way 8-Track "Test-N-Clean" Cartridge. (Not illus.) As above. 15 A 8331. Wt., 5 oz. 1.69

EE THC-7 Cassette Head-Kleen Tape. Removes oxide, other particles. 15 A 8333. Wt., 2 oz. 1.49

Telephone-pickup Microphone

FF TRP-4 Cassette Telephone Pick-Up. Attaches by suction to phone to record talks. Plugs into recorder. 15 A 8334. Wt., 3 oz. 2.69



Robins Tape Recorder Accessories

A TS-8D Deluxe Stereo Tape Splicer. Cuts diagonally. Trims sides of splices. "See-thru" windows show operating positions. Replaceable cutter, blade centering adjustment. Has integral tape dispenser with 100″ roll ½″ splicing tape. Wt., 1 lb.
15 A 8142....................7.99

B TS-7S Stereo Tape Splicer. Similar to TS-8D. Dispenser has 100″ roll 8″ splicing tape. 12 oz.
15 A 8220....................5.99

TS-7J Junior Stereo Splicer. (Not illus.) As above, less dispenser, tape.
15 A 8221. Wt., 8 oz.............4.99

C TK-9 Tape Editing Workshop. Winders for reels to 7″. Stereo splicer has calibrated tape timing/editing scale. Splicing tape, editing pencil, guide book included. 7x14x5½″.
15 A 8348. Wt., 2 lbs...........14.99

D TS-6 Deluxe "Cut-N-Splice". Cuts tape at 30°, 45°, or 90°. 25 self-stick patches in splicer tray.
15 A 8349. Wt., 5 oz.............2.99

E TSV-50 Heavy-Duty Video Tape Splicer. For ½″ wide tape.
15 A 8222. Wt., 1¾ lbs.........12.95

TSV-100 Heavy-Duty Video Tape Splicer. Same as above, but for 1″ wide tape.
15 A 8223. Wt., 1¾ lbs.........12.95

Tape Splicing Patches for Above

15 A 8225. Type TT-247. Pkg. of 60 ½″ patches for TSV-50 splicer. Shpg. wt., 3 oz..........................99¢

15 A 8224. Type TT-248. 48 1″ patches for TSV-100 splicer. 3 oz.........99¢

15 A 8368. Type TST-233. Pkg. of 75 for TS-6 splicer. Wt., 2 oz...........79¢

F TS-14 Professional-Quality Stud Splicing Blocks. Cut tape at 45° 90°. Burnishing plate and roller pr duce well-bonded splices. With cu ting blade and 100 patches.
15 A 8337. Wt., 3 lbs...........14.

Splicing Tape. (Not illus.) 2 oz.

Stock No.	Type	Width	Length	Ea
15 A 8364	TST-235	¼″	300″	6
15 A 8365	TST-376	⅜″	375″	6
15 A 8366	TST-501	½″	250″	6

TT-16 Color-Coding Leader Tape. (N illus.) Five 100′ rolls in 5 colors: re blue, green, yellow and white. On 2 reels. Wt., 14 oz.
15 A 8248.........................2.

TT-101 Economy-Size Professional Wh Leader Tape. (Not illus.) 1200 ft., 1 mil on 7″ reel.
15 A 8753. Wt., 1 lb..............2.

Tape Accessory Kits

G TK-8DLX Deluxe Tape Accessory Kit. Has TS-8D stereo splicer that cuts diagonally, trims sides of splices. Splicer's "see-thru" windows show operating positions. Contains roll of ½″ splicing tape, tape threader, head cleaner, head lubricant, tape cleaning cloth, tape clips, title labels for reels, reel holders, and tape splicing guide book. Shpg. wt., 1½ lbs.
15 A 8169 X..................12.98

H TK-12 Professional Tape Accessory Kit. Specially-assembled kit for use in language lab, studio, or serious home tape recording. Contains TS-8D deluxe stereo tape splicer, 6 rolls ½″ splicing tape, tape threader, tape cleaning cloths, lubricant, head cleaner, tape clips, 150 title labels, tape strobe and light kit, TD-6 demagnetizer, and TM-99 bulk eraser. U.L. Listed. For 117 VAC.
15 A 8213 X. Wt., 14 lbs.........52.50

J TK-30 Deluxe Tape Editing Kit. Has TS-6 splicer, cuts at 30°, 45°, or 90°. Contains 25 splicing patches, 2½″ reel of fully-impregnated white leader tape (¼x100″), 12 tape clips, tape cleaning cloth, 3″ reel of Tape-Kleen, and 12 color-coding title labels for tapes. Shpg. wt., 8 oz.
15 A 8341.........................5.98

K TK-19 Tape Editing Kit. Contains TS-5 "Cut-N-Splice" metal tape splicing block, 25 splicing patches, 3 editing pencils, and tape editing guide book. Shpg. wt., 5 oz.
15 A 8229..........................2.98

L TK-14 Recorder Maintenance Kit. Contains head demagnetizer, 2 tape cleaning cloths, and 3″ reel of tape cleaner. Wt., 12 oz.
15 A 8245..........................4.49

Cleaners and Lubricants

TLA-1 Tape-Kleen/Lubricant Stick. Clean, lubricate both sides.
15 A 8758. Wt., 5 oz..............2.99

TLA-2 Tape Lubricant Stick. Lubricates both sides of tape.
15 A 8759. Wt., 3 oz..............1.99

TK-6 Tape Head Cleaner/Lubricant. Two oz. bottle of each.
15 A 8181. Wt., 6 oz..............1.29

MSW-125 "Swabbies". 125 cotton swabs for cleaning and oiling.
15 A 8342. Wt., 6 oz..............79¢

TBB-1 Blower/Brush. Squeeze blower and soft camel-hair brush.
15 A 8343. Wt., 4 oz..............1.29

THS-1 Head-Kleen Spray. 4 oz. aerosol spray removes oxide, dirt.
15 A 8760. Wt., 6 oz..............1.25

TC-75 Tape Clips. 75 plastic clips prevent tape from unwinding.
15 A 8376. Wt., 8 oz..............89¢

Tape-Kleen. Chemical cloth cleans/lubricates heads, guides. 4 oz.
15 A 8205. THC-5. 5″ Reel........2.19
15 A 8233. THC-3. 3″ Reel........1.19

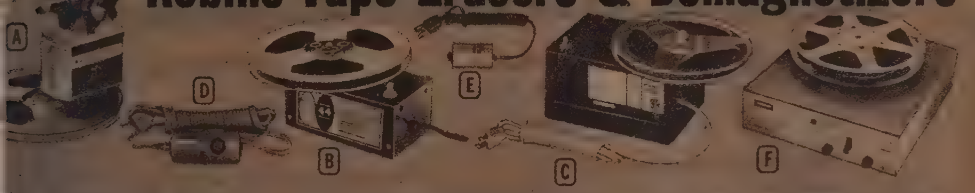
THC-12 Quick-Kleen Felt Pen. Pocket-clip pen cleans oxide, dirt.
15 A 8347. Wt., 3 oz..............99¢

TG-18 Disposable Tape-Clean-Lube Cloths. 18 silicone-treated cloths.
15 A 8351. Wt., 6 oz..............99¢

TK-7 Recorder Care Kit. Two oz. bottles of head cleaner, head and guide lubricant, tape-drive oil. 50 extra-long cotton swabs.
15 A 8352. 1½ lbs..................2.49

TK-3 Recorder Head-Kleen Kit. Two oz. bottles of head cleaner and head and guide lubricant. Plus 25 extra-long cleaning swabs.
15 A 8767. Wt., 8 oz..............1.49

Robins Tape Erasers & Demagnetizers



-88 Hand-Held Bulk Tape Eraser. r ¼" tape on any size reel. tape in just seconds by moving over each side of reel. Size, 4x ¼". 110 VAC. Shpg. wt., 4 lbs.
400........................10.99

-44 Bulk Tape Eraser. Erases es in seconds to below normal ler erase head level. Size, 5¼x ⅛". For ¼" tape, reels to 7". , 50-60 Hz AC. Wt., 4 lbs.
242........................11.49

-99 Professional-Quality Bulk Tape ser. For tape ½" wide, reels to . Erases 3-6 dB below equipment head level in just seconds. Also sound from magnetic-stripped 16mm film. Size, 5¼x6¾x2¾". Listed. For 110 V, 50-60 Hz AC.
114. Wt., 8½ lbs..........29.95

D **TD-6 Professional Demagnetizer.** Leading manufacturers of tape recording equipment recommend that recorder heads be demagnetized after 15-20 hours of use. During normal use of recorders, tape heads build-up magnetism causing noisy tapes and loss of fidelity. Demagnetizer removes magnetism from heads for improved performance. Size, 4⅝x1¼" diameter. U.L. Listed. For 110 V, 50-60 Hz AC. Shpg. wt., 1 lb.
15 A 8154........................7.29

E **Deluxe Head Demagnetizer.** Quickly eliminates noisy tapes and fidelity loss due to build-up of magnetism in recorder heads. Should be used after every 15-20 hours of recorder use. Size. 3½x1¼" diameter. For 110 V, 50-60 Hz AC. Shpg. wt., 8 oz.
15 A 8127........................3.99

TM-77 Bulk Tape Eraser. (Not illus.) Designed for ¼" tape, reels to 7". Erases 2-4 dB below normal recording-equipment erase head levels in just seconds. Rapidly erases sound from magnetic-stripped 8 and 16mm film. Size, 2⅜x3¾x6¼". For 110 V, 50-60 Hz AC. Shpg. wt., 5 lbs.
15 A 8130........................16.75

F **TM-100 Professional Heavy-Duty Bulk Eraser.** Specially designed for lab, studio or demanding home use. Handles audio/visual tapes to 1" wide. Erasure: 50-90 dB below saturation level. For reels to 10½". Safety features include: overheat indicator, individually fused circuits, heavy-duty line cord. Duty cycle: 5 min. on/15 min. off. Size. 3¾x6x8". 110 V, 50-60 Hz AC. Wt., 10 lbs.
15 A 8244........................63.00

High-quality Tape Reels, Storage, and Marking Accessories

Plastic Reels for Every Recording Most-popular sizes. Indicators pe column: Y-yellow, B-blue, rted colors, †-low torque, (V)-deo tape.

ck o.	Mfr's Type	Size	Qty.	PER PKG.
3356	TR20-6	2"	6	.69
3357	TR25-6	2½"	6	.69
3358	TR30-6	3"	6	.69
3359	TR32-4	3¼"	6	.69
3382	TR36-6*	3"	6	.79
3360	TR40-4	4"	4	.79
8361	TR50-2	5"	2	.69
8390	TR51-2Y	5"	2	.79
8391	TR51-2B	5"	2	.79
8393	TR53-2†	5"	2	1.05
8362	TR70-2	7"	2	.75
8396	TR71-2Y	7"	2	.99
8397	TR71-2B	7"	2	.99
8363	TR74-2†	7"	2	1.29
8762	TRV-75(V)	7"	1	1.49

TCP-12 Deluxe Molded Individual Tape Safes. For 7" tapes. Hinge covers. Safe bottoms have dovetail grooves to fit metal wall-mount bracket included. Set of 12. Less tape, reels.
15 A 8102. Wt., 8 lbs...........11.89

Tape Storage Vaults. Metal, durable enamel finished. Ribs on cans nest for stacking. Less reels. **In pairs.**
15 A 8207. TC-7. 7" cans. 1 lb...2/1.19
15 A 8208. TC-5. 5" cans. 14 oz...2/79¢

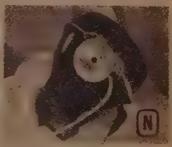
RMC-6 Plastic Tape Mailing Canisters. High impact, reusable. For reels to 3¼". Includes 2-sided address cards. Shpg. wt., 5 oz.
15 A 8255............Pkg. of 6 for 1.29

TL-5 Color-Coded Tape Box Ends. 30 self-stick, textured book binding strips in 6 colors. Wt., 5 oz.
15 A 8246....................1.98

TL-240 Color-Coded Title Labels. 240 labels in 6 colors: red, blue, green, orange, yellow and white. Self-stick, 2½". For quick identification of canisters, reels, boxes, etc.
15 A 8249. Wt., 2 oz.............1.29

TK-1 Tape Log Kit. Color-code and catalog your tapes. Includes 240 title labels, 120-page log book, 72 tape-end tabs, 48 numbered cuing spots, 30 box ends, all self-stick in 6 colors, feather writing pen.
15 A 8247. Wt., 14 oz.............5.29

TT-246 Color-Coded Index, Cuing Spots. Self-stick spots numbered 1-8. Package of 48 in 6 colors: blue, green, red, orange, yellow and white. Index and color-code recorded subjects on reel for rapid identification.
15 A 8252. Wt., 1 oz.................99¢



Recorder Repair Devices and Shut-off Unit

W-1 Precision Tape Strobe. All-etal, chrome-plated strobe with sion-machined needle bearings. rately tests speed of 7½ and 3¾ ecorders for reduction of wow lutter. Shpg. wt., 1 lb.
8116..........................6.99

O-1 Automatic Tape Shut-Off Unit. ttaches to side of recorder. Reer plugs into unit. Shut-off arm y contacts tape. When tape end een played, the unit automatically uts-off recorder. 3 amp rated. 110 VAC.
8353. Wt., 1 lb..................4.95

K **TVU-1 Professional VU Meter.** Prevents overload or recording at too low level. Two color scale. Modulation: 0-100%. VU: −20 to +3 dB. 2700 ohms. Use with high or low-Z circuit. 2x$1\frac{11}{16}$" with ¼" terminals.
15 A 8761. Wt., 6 oz..............3.99

L **TTG-5 Tone Generator-Cuing Device.** Mechanically "prints" a continuous tone of any length on tapes.
15 A 8371. Wt., 6 oz..............19.95

TAT-100 Azimuth Head-Alignment Tape. (Not illus.) 100' tape on 2½" reel; 6 kc steady tone for head alignment.
15 A 8373. Wt., 3 oz...............1.29

Phone Pick-Up Mikes

M **TRP-2 Phone Pick-Up.** Attaches by suction cup. 5' cable. Less plug.
15 A 8354. Wt., 6 oz...............2.29

N **TB-3 Solid-State Beeper and Phone Pick-Up.** Integrated circuit. Signal generator/timer and high-efficiency ferrite core induction coil. Injects 1 kc "beeps" into phone line and recorder at 15 second intervals. Has on/off switch and 6' cables to phone and recorder. Fastens to phone by spring. For 110 VAC. Wt., 18 oz.
15 A 8374.........................19.95

Nortronics Tape Heads and Accessories

REPLACEMENT HEADS FOR TAPE RECORDERS

In function column R means Record, P-Play, E-Erase. †Indicates mounting kit when required; see Quik-Kit table (right) for prices. Shpg. wt., 1 lb.

FOR REVERE, WOLLENSAK, 3-M

Stock No.	Mfr's Type	Function	Models	EACH
15 A 8650 S	*RPE-20 or *RPE-23	RPE	10, 11, 15-27, 200, 202, 700, 700D, 750, 752, 762, 800, 800D, 862, 850	18.60
15 A 8651 S		RPE	852, 900, 905, 925, 926, 1000, 1005, 1025, 1026, 1100, 1105, 1125, 1126, 1200, 1205, 1225, 1226, 1400 (B, C, C, E). 1405, 1425, 1426, 1500, 1520, 1570, 1600, 1700, 1800, 2000, 2005, 2025, 7805, 70000 Series	15.60
15 A 8651 S	RPE-23	RPE	100, 300, 301, older 2TR mono	15.60
15 A 8598 S	RPE-21	RPE	1500(SS, AV, D)	22.80
15 A 8599 S	7601	RP	11-4, 204-4, 1440 (B, C, D, E) 1515-4, 1616-4, 1818	28.50
15 A 8603 S	6002	RPE	1280, 1281	33.00
15 A 8599 S	7601	RP	1580, 1780 (B, C, D, E), 1980 (B, C, D, E) 1981 (B, C, D, E), 2200, 2205, 2225	28.50
15 A 8665 S	6005	RPE	5200, 5250, 5280, 5300	33.00

*RPE-20 Replaces original Nortronics head—RPE-23, original Shure.

FOR SONY

Stock No.	Mfr's Type	Function	Models (May Be Prefixed TC or SSA)	† QK	EACH
15 A 8854 S	1000	RP	262 (D, SL), 263 (D, E), 464 (CS, D, SL)	102	21.00
15 A 8854 S	1000	RP	300, 500, 501, 521	119	21.00
15 A 8607 S	1007	RP	200, 250, 260, 350	102	21.00
15 A 8711 S	1202	P	777S-4, 600	102	28.20
15 A 8609 S	1210	R	263-(D, E), 350, 600, 777S-4	102	28.20
15 A 8709 S	1401	E	260, 105, 200, 250,	306	12.00
15 A 8610 S	1402	E	262 (CS, D, SL), 300, 500, 501, 521, 777S-4	305	12.00
15 A 8610 S	1402	E	263, (D, E), 600	306	12.00
15 A 8611 S	2601	RP	101	102	15.90
15 A 8612 S	3602	E	101	305	8.00
15 A 8682 S	3600	E	102	19	8.00
15 A 8613 S	3002	RP	123	....	8.40
15 A 8706 S	3000	RP	135, 111		8.40
15 A 8697 S	3001	RP	905A, 801A, 102 Cement to mount	....	8.40
15 A 8613 S	3002	RP	900	21	8.40

FOR WEBCOR

Stock No.	Mfrs Type	Function	Models; some prefixed CP, EP, LT, PB, TP	† QK	EACH
15 A 8066 S	7403	RP	2001-(1, 1A, 1B, 1C), 2002, 2009, 2203, 2206-1, 2800 & 2900 series	...	10.50
15 A 8280 S	3100	RP	2200 (–1), 2202 (–1), 2300 (–1), 2302 (–1), 2303 (–1), 2400-1, 2402 (–1), 2500 (–1, 10), 2502 (–1, 10) 5400	...	8.40
15 A 8854 S	1000	RP	2008, 2208, 2323 (–1, 1A)	...	21.00
15 A 8345 S	7500	E	For all models above	...	8.00
15 A 8854 S	1000	RP	2007, 2107 (–1), 2150, 2007 (–1), 2208-1, 2250 (–1), 2328 (–1), 2356 (–1, 1A, 1B), 2357 (–1), 2360 (–1), 2366-1B, 2391, 3392, 3393, 4007-1, MUSIC MAN	...	21.00
15 A 8610 S	1402	E	For all models above	18	12.00
15 A 8442 S	6003	RPE	2520-1, 2522-1, 2456 (–1), 2457 (–1), REGENT	...	33.00
15 A 8474 S	7400	RP	For all models utilizing replaceable pole piece	...	6.00

FOR MICHIGAN MAGNETICS

Stock No.	Mfrs Type	Function	Models	† QK	EACH
15 A 8697 S	3001	RP	3L20-101, 3L205	20	8.40
15 A 8674 S	1800	RP	2835741, 5B20LS, 7B17, 10B20LS	38	23.30
15 A 8665 S	6005	RPE	2NV2Q10B-1	38	33.00
15 A 8705 S	1009	RP	69NR2QB-1, 300, 5Q08, 5Q8, 5QT17 (105, 300), 5P17-300	...	21.00
15 A 8706 S	3000	RP	7H17, 7H40, 7L17 (–108), 10L17-104	20	8.40
15 A 8709 S	1401	E	9QE3, 9QTE3, 12ER2Q-1, 12EQ, 18HE6, 9EQ3	18	12.00
15 A 8733 S	6009	RPE	5AV17, 6AV17-200, 4NV2Q10B-1	38	33.00

FOR BELL SOUND

Stock No.	Mfr's Type	Function	Models	† QK	E
15 A 8706 S	3000	RP	171, 200, 201, 202, 203, 205-OB 206, 207-S, 208, 210	20	
15 A 8734 S	3601	E	All above except 203, 205-OB, 207-S, 208	18	
15 A 8705 S	1009	RP	220, 223, 228, 233, 238, 238-A, 300, 320, 337, 347, 401, 402, 403, 404, 405, 406, 601, 603	38	2
15 A 8709 S	1401	E	All above except 223, 228	18	1
15 A 8603 S	6002	RPE	360, 367 deck with 360 Amp	38	3
15 A 8738 S	7600	P	Use with above	20	2
15 A 8651 S	RPE-23	RPE	65B, 75, 76, 88, 204, 205-OB, 2260, 2261	...	1

FOR VIKING

Stock No.	Type	Function	Models	†QK	EA
15 A 8747 S	3101	P	75, 76, 77, 78, 770	21	8
15 A 8682 S	3600	E	75, 76, 77, 78, 770	19	8
15 A 8749 S	1201	RP	75, 76, 77, 78, 770	66	28
15 A 8866 S	1400	E	75, 76, 77, 78, 770	19	12
15 A 8769 S	1200	RP	85, 86, 87, 88, 880, 95	.....	28
15 A 8770 S	1400L	E	85, 86, 87, 88, 880, 95	.....	12
15 A 8773 S	1205	R	85, 86, 87, 88, 880, 95	.....	28
15 A 8607 S	1007	RP	423	.....	21
15 A 8775 S	1401L	E	423	.....	12

MISCELLANEOUS REPLACEMENT HEADS

Stock No.	Type	Description	EA
15 A 8854 S	1000	4-Tr. St. R/P: high imp.	21.
15 A 8984 S	1001	4-Tr. St. R/P: med. imp.	21.
15 A 8706 S	3000	2-Tr. Mono R/P: high imp.	8.
15 A 8697 S	3001	2-Tr. Mono R/P: med. imp.	8.
15 A 8866 S	1400	4-Tr. St. Erase: high imp.	12.

QUIK-KIT HARDWARE

15 A 8683 S	18	Side mount, all erase heads	1.
15 A 8687 S	19	Base mount, all erase heads	1.
15 A 8325 S	20	Side Mount R/P	1.
15 A 8688 S	21	Base mount, R/P 3000 Series	1.
15 A 8372 S	38	Side Mount	1.
15 A 8689 S	66	Base mount, R/P all others	1.
15 A 8690 S	102	Sony R/P mount	1.
15 A 8673 S	119	Sony R/P mount	1.
15 A 8729 S	305	Sony erase mount	3.
15 A 8828 S	306	Sony Erase Mount	1.

ADJUSTABLE MOUNT ASSEMBLIES

Full range of adjustments for height, face and azimu Can use two TG-7 tape guide posts. Base size, 1$\frac{1}{16}$" x1$\frac{27}{32}$" L with tabs; 1$\frac{7}{32}$" L without tabs, 4 oz.

Stock No.	Type	Description	EA
15 A 8825 S	74	All R/P heads except 3000, 3100	2.
15 A 8826 S	77	For 3000, 3100 series R/P heads	2.
15 A 8827 S	78	For all erase heads	2.

8-TRACK HEAD

MODEL 5800. Replacement tape head for automobile ste tape players, including Buick, Chevrolet, Chrysler, De Ford, Lincoln, Motorola, Orrtronics, Muntz, Ranger, many others.

15 A 8782 S. Shpg. wt., 8 oz. 15

CASSETTE HEADS

15 A 8614 S. Mono cassette record/play head for 0. tape in C60, C90 and C120 cartridges. Improved respo Preset tape guide. Wt. 6 oz. 15

15 A 8615 S. Stereo cassette record/play head for 0. tape in C60, C90, C120 cartridges. For improved respo Shpg. wt., 6 oz. 21

RECORDER ACCESSORIES

15 A 8111. AT-100 Alignment Tape. Full-track 7½ ips. head azimuth alignment. NAB testing response of recorder or tape head. Shpg. wt., 4 oz. ....

15 A 8795. TG-7 Tape Guide Post. Adjustable height, chro plated brass. With hardware, instructions. Wt., 3 oz.

Oscillator Transformers. Provide 40-120 volts rms at 60- kHz to record, erase heads. Shpg. wt., 6 oz.

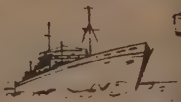
15 A 8059 S. T-70-T2. Plug-in PC Board Circuits 4

15 A 8895 S. T-60-T2. For Transistor Circuits 4

15 A 8719 G. New Tape Head Replacement Guide. Listing recorder model and original head part number.......F

Listen to dramatic VHF-FM emergency messages

Here's what you hear on the various bands . .



en listening to VHF, location is ortant. The closer you are to a way, airport, harbor, or other ce of VHF use, the more messages you will hear. Calls will be of t duration with random elapsed between calls.

0 MHz. You can receive police , fire, civil defense, utilities, radio telephone, radio dispatched repair vehicles.

108-140 MHz. Aviation Band.

152-174 MHz. U.S. Weather Bureau, railroads, cabs, police, fire.

450-470 MHz. Police, fire, etc.

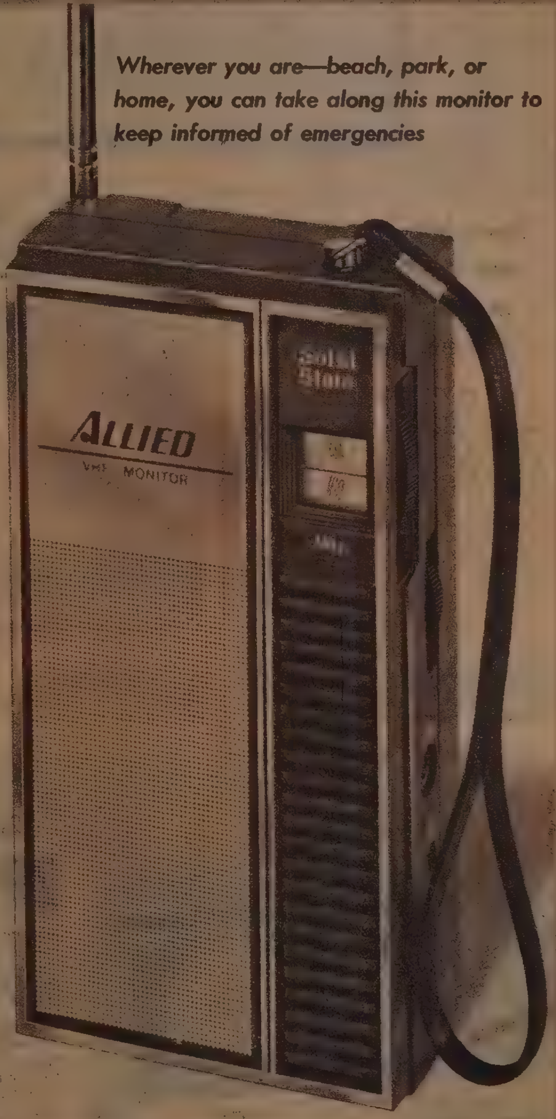
Check with local authorities for specific frequencies used by the various services in your area.

Allied® solid-state hand-held portable HF-FM Monitor Radios

Wherever you are—beach, park, or home, you can take along this monitor to keep informed of emergencies

Fire calls

Police calls



Two models cover 27-50 MHz and 146-175 MHz

17⁹⁵ Each

- Modern solid-state superhet circuit
- Pocket size—carry it anywhere
- Earphone jack for private listening
- Provision for 110 VAC Adapter

del A-2586 for 27-50 MHz. Now, a VHF-FM dheld superhet monitor at amazingly low . Take this battery-powered portable anyere and monitor local police, fire, civil defense, ities, radiotelephone, radio-dispatched re vehicles, and many other services. Solide for instant operation. Superhet circuit vides excellent performance.

-contained 2$\frac{3}{5}$" speaker. Built-in swivel scoping antenna and provision for external enna. Earphone jack. Size, 6x3$\frac{5}{32}$x1$\frac{1}{8}$". With r "AA" penlight batteries, carrying strap, . earphone. From Japan.

A 6978 S. Shpg. wt., 1 lb. 17.95

del A-2587 for 146-175 MHz. Similar to above, for 146-175 MHz. Monitors many of the ne services, plus United States Weather reau forecasts, railroads, taxicabs, others.

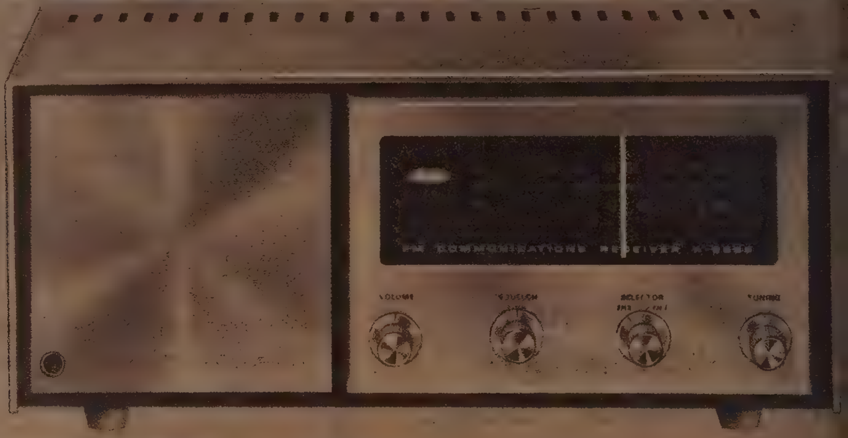
A 6977 S. Shpg. wt., 1 lb. 17.95

ACCESSORIES

A 9083. 117 VAC Adapter. Wt., 2 lbs. 3.95

A 5083 "AA" batteries. Wt., 4 oz. . . . . . 2/27¢

Allied® dual-band VHF-FM Monitor Receiver



Tunes both 30-50 MHz and 152-174 MHz for dramatic police, fire and emergency calls

30-50 MHz FM Band

Police, fire, civil defense, other emergency services, utilities, radiotelephone service, radio dispatched repair vehicles, radio paging service, industrial highway maintenance.

152-174 MHz FM Band

Police, fire, civil defense, other emergency services, United States Weather Bureau forecasts, railroads, taxi-cabs, forestry and conservation, highway trucks, private mobile telephone.

NOTE

Frequencies used differ in various parts of the country. Check with local authorities for the specific frequencies used by the various services in your own region.

79⁹⁵

- **Four IF stages provide excellent selectivity**
- **Stable zener-diode-regulated power supply**
- **Squelch circuit silences speaker between calls**

Model A-2589. Solid-state VHF-FM receiver lets you listen in on the industria
Land Transportation, Public Safety and Domestic Public Services in you
area. Covers both the 30-50 MHz and 152-174 MHz FM bands. Handsomel
styled in modern trim case. Has large easy-to-read slide-rule dial for precis
tuning. Solid-state circuit offers instant operation, and dependable receptio
of the FM services. This sensitive receiver is designed to provide clear, stati
free reception.

Tuned RF and mixer stages for greater sensitivity and signal pulling powe
Four IF stages for greater selectivity in station separation. Powerful push
pull audio output drives a built-in four inch speaker. Automatic Volum
Control (AVC) prevents overload or blasting by strong signals and builds u
weak signal for best possible reception. Adjustable squelch eliminates back
ground noise during standby operation.

Highly stable regulated power supply. Panel jack for external 8-ohm speake
or headphones. 50-75 ohm antenna input. Order antenna on page 165 fo
best long-range reception. Gray metal case, 5 7/16x11 7/8x7 3/4". For 117 V, 50-6
Hz AC. From Japan. Shpg. wt., 11 lbs.

17 A 6980 U...79.9
17 A 6226. Dual Headset with Plug and Cord. Wt., 1 lb.................5.9

SPECIFICATIONS

Range: 30-50 MHz and 152-174 MHz. *Sensitivity:* Better than 4 μV for 2
dB. S/N. *IF:* 10.7 MHz. *Power Supply:* Full wave, transformer operated
zener diode regulation.

Portable dual-band VHF-FM receiver

29⁹⁵

Featuring tuned RF, four IF stages in top performance solid-state circuit

Midland 10-408. Dual-band solid-state VHF-FM portab
radio lets you listen to industrial, Land Transportatio
Public Safety, and Public Services in your area. Cove
both the 30-50 MHz and 148-174 MHz FM bands. R
stages for greater sensitivity and image rejection.

Boasts four IF stages for great output and selectivity. H
30" swivel-type telescoping antenna and large built-in 2³⁄
speaker. Jacks for earphone. Complete with earphon
carrying strap, and six "AA" batteries. Olive bron
grained polystyrene cabinet with chrome-color trim, 7x3
x1½". From Japan.
17 A 9800 S. Shpg. wt., 5 lbs..............................29.9

SHIPPING NOTE: Items with suffix U, W or Z in stock no. s
truck or express. See Ordering Info. pag

Electra solid-state battery/AC FM Monitor

Eight-channel FM
Monitor . . automatic
scanning system

Low as 139^95
$7 monthly
see page 438

wo crystal-controled models:
50 to 174 MHz VHF-FM or
50 to 470 MHz UHF-FM
. both with FET's in front-end

CHANNEL
COAP CUMBERLAND INDIANA

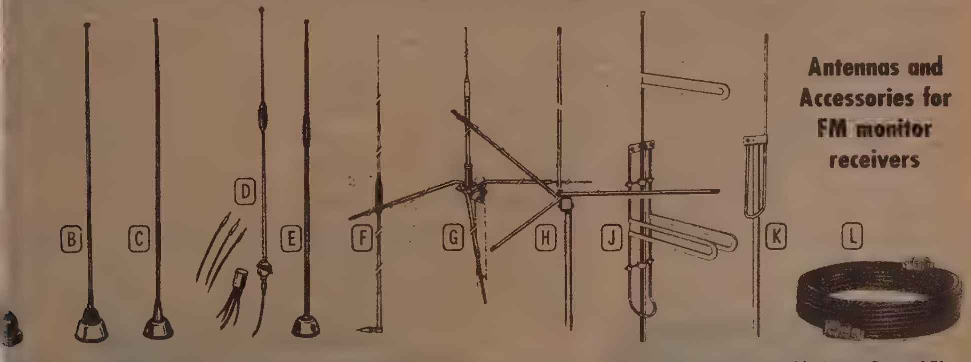
que monitor automatically scans up to eight crystal-
rolled channels within a 10 MHz spread. Locks in on
first channel to become active, then resumes scanning
n that channel becomes inactive. Manual selection also.
nnel indicator lamp lights for each channel.

ploys the most recent developments in solid-state cir-
s. Field-Effect-Transistors are used in front-end for
llent reception of even weak signals. Six integrated cir-
s in switching and limiter-discriminator circuits assure
ble performance and high selectivity.

Adjustable squelch control for silencing between calls. Built-in telescoping antenna; Motorola-type jack for auto or external antenna. Metal case, 4x9x6". With cables for 117 VAC and 12 VDC negative ground, and mobile mounting bracket. Order crystal card below.
17 A 9216 U. 150-174 MHz. Shpg. wt., 5 lbs. 139.95
17 A 9215 U. 450-470 MHz. Shpg. wt., 5 lbs. 149.95

Crystal Certificate Card. Required for each frequency. Fill out card, send to mfr. Crystal sent within 30 days.
17 A 8195 S. . . . . **Each 5.00**

Antennas and Accessories for FM monitor receivers



Antenna Specialists MON-1. Univer-
al location mobile antenna covers
-174 MHz and 450-470 MHz at low
. Mounts on any flat deck. Pin
g connection plus SO-239 connec-
ns. With 15′ RG-58/U cable.
A 8310 X. Wt., 1½ lbs. 7.95

Antenna Specialists MON-2. "Quick-
Grip" no-hole trunk lid mount.
standing performance from 118-
M Hz. Screw-type adapter for field
ting to exact frequency. With 16-ft.
-58/U coax cable, pin plug plus
1 adapter for SO-239 connections.
A 6150 X. Wt., 2 lbs. 13.95

Antenna Specialists MON-14. "Quick-
Grip" no-hole trunk lid mount.
at reception across entire 25-50
z band. With 16′ cable, pin plug,
1 adapter for SO-239 connections.
A 8311 X. Wt., 2 lbs. 16.95

D **Antenna Specialists MON-10.** AM and 25-50, 130-174, 450-470 MHz. Auto use with cable, pin jack.
17 A 8312 X. Shpg. wt., 2½ lbs. . 24.95

E **Antenna Specialists MON-13.** "Quick-Grip" covers 25-174 MHz or adjusts to specific frequency. No holes to drill. With 16′ lead, pin plug plus M-41 for SO-239 connections.
17 A 8313 X. Wt., 2 lbs. 16.95

F **Antenna Specialists MON-7.** High-performance center-loaded portable telescoping whip antenna for 25-50 and 130-174 MHz. Self-supporting.
17 A 9219 X. 12 oz. 10.95

G **Antenna Specialists MON-8.** Double-loading-coil ground plane antenna. 30-50, 108-174 MHz. Omnidirectional pattern. For masts up to 1½" dia. SO-139 connector. Order coax.
17 A 6716 X. Wt., 6 lbs. 19.95

H **Allied/Knight ¼-Wave Ground Plane Antenna.** Good range on 30-50 or 108-174 MHz bands. For masts up to 1⅝" dia. Order coax cable.
17 A 6714 X. Wt., 3 lbs. 9.95

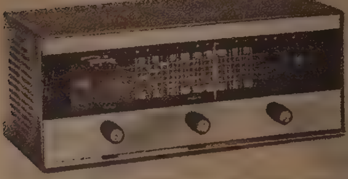
J **Avanti "Interceptor" Base Antenna.** Modified "J". Seamless alum. 25-50, 108-174 MHz. Lightning protected. 9′ high. 50 ohms. 3 dB gain on 16′ mast. SO-239 connector.
17 A 9217 X. 2 lbs. 21.95

K **"Tracer"** As above but for 440-470 MHz. 40" high. 3 dB gain. Mast.
17 A 9218 X. Wt., 1½ lbs. 9.95

L **Coaxial Cable.** Foam coax cable with PL-259's. Use RG-58/U for 30-50 MHz; RG-8/U for 108-174 MHz.
17 A 6883. 50′ Coil RG-58/U Cable. Shpg. wt., 2 lbs. 5.50
17 A 8522. 100′ Coil RG-8/U Cable. Shpg. wt., 11 lbs. 13.95

t your antenna now on Allied's Credit Fund Plan

Regency VHF FM Monitors for every purpose



Low as **84⁹⁵** *Electronic squelch and tuned RF*

Continuously tunable Monitors

Model MR-10D for 152-174 MHz. A new listening experience, with advanced design and compact styling. Covers local police, fire, emergency weather, railroads, private mobile telephone, utilities, forestry, and much more. Features include: tuned RF stage for best image rejection; 4″ speaker; adjustable, squelch; illuminated slide-rule dial; provision for external speaker, headphones. Sensitivity, 4.0 μV for better for 20 dB quieting. Audio output, 1.6 watts (10% distortion). 7 tubes, rectifier. 7⅞x11¼x6½″. 105-125 V, 60 Hz AC.
17 A 9650 X. Wt., 11 lbs.........**84.95**

Model MR-33D for 30-50 MHz. Similar to above, but for low VHF-FM band. 7⅞x11¼x6½″. 105-125 V, 60 Hz AC.
17 A 9651 X. Wt., 11 lbs.........**84.95**

Model AR-136D Aircraft AM Monitor for 108-136 MHz. Continuous tuning with high sensitivity (1 μV for 10 dB quieting), excellent signal-to-noise ratio, low oscillator radiation. Adjustable squelch, 0.5 to 100 μV. Power output, 1 watt. 4″ speaker. Provision for external speaker. Illuminated slide-rule dial. 6¼x12x6⅜″. Tube circuit. For 110-120 V, 60 Hz AC.
17 A 6512 X Wt., 14 lbs.........**99.95**

130⁰⁰ *1 μV sensitivity . . dual conversion*

Crystal-controlled Monitors

Model TMH-2 for 150-175 MHz. Solid-state for instant sound. Dual-conversion superhet, with up to 6-channel switching, operates on 117 VAC and 12 VDC (Order cable below). 1 μV sensitivity pulls in the weak stations. Electronic squelch silences speaker between stations. Provision for internal 12-volt battery pack (below). Battery will be activated automatically should powerline fail or no power outlet be available. Can also be used in 12-volt vehicle or boat. 24 transistors, 9 diodes. Blue vinyl-laminated steel cabinet, 4¾x11x7½″. With one crystal—specify frequency. Certificate for extra crystals and accessories below.
17 A 6578 CF. Wt., 6½ lbs.....**130.00**

Model TML-2 for 30-50 MHz. Same as above except covers lower frequency band. Covers Industrial, Land Transportation, Public Safety, Domestic Public Services. With One crystal—*specify frequency.*
17 A 6577 CF. Wt., 6½ lbs.....**130.00**

17 A 8195 S. Certificate for Extra Crystals. For TMH-2, TML-2...Each **5.00**

17 A 6580 F. Battery Charger. 1 lb. **28.35**

17 A 9674. 12-VDC Power Cord. 1 lb. **2.95**

"F" items shipped express from Indianapolis, Ind. No C.O.D. Allow 30 days.

200⁰⁰ *Crystal control or tunable*

Deluxe dual-band FM Monit

Model DR-200 for 30-50 and 152-17 MHz. Highly versatile two-band moni tor receiver covers both VHF-F bands. You hear police, fire, emergen cy weather broadcasts, railroads an utilities, private mobile telephone industrial and highway maintenan facilities, radio paging, forestry se vices, and many more fascinating VH broadcasts. Combines continuous tu ing with stable crystal control. Ju flip the switch to select optional cryst control for one frequency on ea band, or continuous tuning acro the entire frequency range

Dual-conversion superhet circuit. Se sitivity (for 20 dB quieting), 1 μV o 30-50 MHz and 2 μV on 152-174 MH Selectivity: 3 dB at ±20 kHz, 80 d at ±30 kHz. Image rejection: 65 d on 30-50 MHz, 30 dB on 152-17 MHz. IF rejection: 60 dB on 30-5 MHz, 100 dB on 152-174 MHz. Ou put, 1.5 watts. 13-tubes. 14½x6¼ 9½″. For 105-125 V, 60 Hz AC. Ord speaker and crystals below.
17 A 9666 U. Wt., 7 lbs........**200.0**
17 A 9672 X. Model DRS-1 6″ Speak Wt., 7 lbs......................**15.9**
17 A 8195 S. Crystal Certificate Car For crystals for Model DR-200 Mon itor above..................**Each 5.0**

Automatic scanning of up to eight channels

139⁰⁰

Automatic-scanning 150-174 MHz Monitoradio

Model TMR-8. Automatically scans up to 8 crystal-controlled channels over an 8 MHz range. Locks in on the first active channel, resumes scanning when that channel becomes inactive. Channels can also be selected manually. Solid-state with 5 integrated circuits. 5 watt output, 4″ speaker. Telescoping antenna. Jack for external speaker. With cables for 117 VAC and 12 VDC, mounting bracket. Less crystal, order below. 2¼x8½x5½″.
17 A 9221 X. Shpg. wt., 8 lbs......................**139.00**
17 A 8195 S. Crystal Certificate..................**Each 5.00**

Up to 12 crystal-controlled channels

119⁰⁰

Manual-selection 150-174 MHz Monitoradio

Model TMR-12. Has crystal sockets for up to 12 channe Solid-state with 2 integrated circuits. Features balan mixer for superior intermodulation rejection. 5 watt aud output, 4″ speaker. Sensitivity of 0.5 μV for 20 dB quietin Selectivity, 50 dB down ±15 kHz. Telescoping antenn Jack for external speaker. With cables, for 117 VAC a 12 VDC, mounting bracket. Less crystal, order belo 2¼x8½x5½″.
17 A 9222 X. Shpg. wt., 7 lbs......................**119.**
17 A 8195 S. Crystal Certificate..................**Each 5.**

SHIPPING NOTE: Items with suffix U, W or Z in stock no. sent fr or express. See Ordering Information pag

/HF Monitors, Direction Finder

finuous tuning
police, fire,
ther, CD, more.
models: 25-50
50-175 MHz

89.95 Each

enable base Monitors

101 for 25-50 MHz. Continu-
ıble receiver. Has tuned RF
perature-compensated oscil-
tronic squelch, speaker. 500-
output, external-speaker
8x10″. 115 V, 60 Hz AC.
U. Wt., 11 lbs. 89.95

102 for 150-175 MHz. As
t higher band.
U. Wt., 11 lbs. 89.95

101DX for 25-50 MHz. Tun-
er plus provision for 1 crys-
ht. DC power cord, mobile
15 VAC/12 VDC neg. gnd.
U, Wt., 12 lbs. 134.95

102 DX for 150-175 MHz.
stal card at right.
U. Wt., 12 lbs. 134.95

Crystal-controlled 150-175 MHz FM for police, fire, utilities, CD, buses, much more

140.00

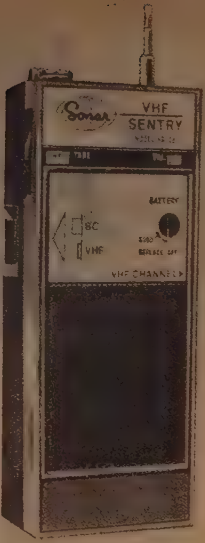
Sonar mobile/base Monitor

Model FR-105. Sensitive 150-175 MHz FM monitor operates in any 12-V vehicle or from 117 V, 50-60 Hz AC line. Provision for up to six crystal-controlled channels, temperature-compensated noise-free squelch, provision for continuous-tone decoder module, 2x6″ built-in speaker, 1½ watt audio output. Solid-state circuit. Aluminum case, 2⅝x6⅞x8½″. With AC and DC cables, mounting bracket. Order crystal card below.
17 A 9726 U. Wt., 5 lbs. 140.00

Crystal Certificate Card for Sonar FR-101DX, 102DX, 105, 106. For each frequency, Allied mails you a card to send to CTS. CTS ships crystal to you.
17 A 8195 S. . . . . .Each 5.00

Two compact two-channel FM models: 35-50 MHz, 150-175 MHz

39.95 Each



Sonar hand-held Monitors

Model FR-103 for 150-175 MHz Band. Solid-state receiver operates on two crystal-controlled channels. Listen in on industrial, land transportation, public safety, domestic public services (VHF-FM), continuous weather reports at 162.55 MHz; plus regular AM broadcasts wherever you are. Fits inside your pocket—delivers loud, clear reception. Telescoping antenna, battery condition meter. Only 5⅞x 2½x1⁵⁄₁₆″. With battery and earphone. Order crystal certificate card at left for each frequency. From Japan.
17 A 8190 S. Wt., 1 lb. 39.95

Model FR-106 for 25-50 MHz. As above, for two channels in 25-50 MHz band.
17 A 8199 S. Wt., 1 lb. 39.95

Hz,
A

VOLUME
OFF
FREQUENCY SELECTOR
SQUELCH

certificate
plug-in card

9.95

Petersen base/mobile Monitor Receiver

2-4. Can operate on 2 through 200 MHz, AM or four-channel capability. Includes certificate for requency card to be filled out and sent to factory. peaker, squelch control. Size, 3⅜x5¾x7½″. For /12 VDC; order 12 V cord below.
X. Shpg. wt., 4 lbs. 69.95
Mobile Mounting Bracket. 1 lb. 4.25
DC Power Cord. Shpg. wt., 8 oz. 2.95
S. **Additional Plug-In Frequency Card.** Fill out cerıd mail to Petersen. Petersen will ship to you days. . . . . .Each 14.95

Nova-Tech "Action" Radio-Direction Finder

129.95

Solid-state portable tunes standard AM broadcast band and both FM business radio bands, 30-50 MHz and 150-175 MHz; marine weather and beacons on 190-400 kHz; marine shortwave band, 1.5-4.5 MHz. Radio direction finder has rotating antenna for accurate bearings; level control for sharp, clear nulls; null meter; 180° left/right bearing scale; flip-up pelorus sights for visual bearings. Squelch control; dial light; telescoping antenna; headphone jacks; removable bracket/handle. With leather carrying case, batteries, AC adapter. Size, 6x9x2½″. From Japan.
17 A 6541 U. Shpg. wt., 8 lbs. 129.95

Popular marine electronic equipment

Midland VHF Monitor Converters

39.95 Each *Silicon transistor tuned RF stage*

Add a battery-powered VHF converter to your AM radio and monitor exciting messages from police, fire, CD, emergency services, and mobile telephones. Use in your boat, car, or as a portable. Solid-state. Fine-tuning control. Sensitivity, 2 μV for 10 dB S/N. Operates for hours on a single set of batteries (order 8, below). Jacks for external 12-VDC and antenna. Metal case, 4x4x5½". Japan. Shpg. wt., 4 lbs.

17 A 8196 S. 13-272. 152-174 MHz. (AM) 39.95
17 A 8197 S. 13-270. 30-50 MHz. (FM). 39.95
18 A 5083. Batteries. 4 oz.........Pkg. 2/27¢

Hartman Direction Finder

59.95 *Solid-state navigation aid*

Radio/compass takes bearing on land or sea with only one reading. No calculations to make. Calibrated bearing finder has floating marine compass and level indicator. Luminescent azimuth dial. Null meter shows sound level for navigation fixes. Tunes 540-1600 kHz. Water-tight case. Battery; guidebook lists over 2000 radio stations in U.S. Portable or permanent mtg. 1¾x6¾x5".

17 A 9758 S. Wt., 3 lbs.......59.95

Hartman Depth Fin

69.95 *Works lik navy's son*

Model DF-303. Completely p
depth sounder locates sch
fish, underwater wrecks, et
erates under the same princi
U.S. Navy's sonar equipme
dicates depths to 120 feet.
sensitive integrated ci
Flashing neon indicator; 20
ings per second. Beam widt
Easy mounting 1" diameter
ducer. Use 9 and 1.4-V ba
Size, 2x5x6½". Wt., 1 lb.
17 A 9796 S...............

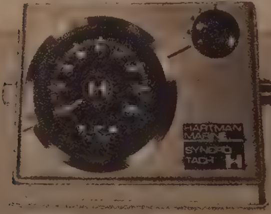
CTS/KNIGHTS MONITOR CRYSTAL CERTIFICATE

One required for each frequency. Allied mails you the certificate, you fill it out and mail to CTS/KNIGHTS. Within 30 days CTS/KNIGHTS will mail your crystal directly to you, prepaid.

17 A 8195 S. One certificate for each frequency..............................Each 5.00

SOME OF THE UNITS THIS CERTIFICATE COVERS

ELECTRA BEARCAT. LAFAYETTE: PF30, PF50, PB50, PF175 Lo-Band, HA39, HA42, HA45, HA46, PF60, PB150, HA153, HA155, PF175 Hi-band. **REALISTIC:** Pro-2. **REGENCY:** "Listen-In," TML and TMH series. **SONAR:** FR101, FR102 in 70 MHz, FR103, FR104, FR105, FR106, FR107 aircraft. **SONIC INDUSTRIES:** Eavesdropper Si. **SQUIRE:** FM Alert # 30, Alert # 152, Lo-band alert. **TROJAN:** TR100H. **UNIMETER:** Reporter HA155. **SENTRY** B20-102,

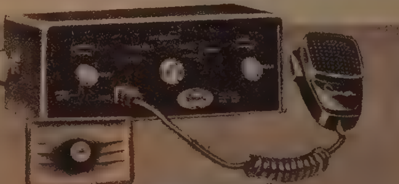


Hartman Wireless Tach

49.95 *Battery powered*

Model ST-703. Fully portable wireless tachometer is specially designed for testing spark ignition engines. No installation problems because there are no bothersome connections to make. Detects engine trouble, determines highest efficiency. Reads 0-8000 rpm with 3% accuracy. On-off sensitivity control. 2x5x6½". Use 9-volt battery. Shpg. wt., 1 lb.

17 A 9797 S....................49.95



Complete With 8" Trumpet Speaker

Sonar 2-way Hailer

125.00 *Operates as Hailer or 2-way Intercom*

Model HA-1. 16-watt unit lets you hail other boats, persons ashore, swimmers or skiers; can be set for automatic or manual fog horn signals; and operates as a 2-way intercom. Solid-state. Five-position function switch; separate listen and hail volume controls. 2½x6¾x5". For 12 VDC. With push-to-talk mike, mtg. bracket, speaker. Shpg. wt., 8 lbs.

17 A 6335 X..................125.00

Sonar Depth Sounde

139.50 *Shows water-d up to a full 25*

Model D-120B. For commer
pleasure craft. Warns against r
aground. Easy-to-read 360° 4
with 1-ft. graduations shows
depth from 1 to 250 feet. Eas
stalled even while boat is in
Also indicates schools of fish.
transducer, gimbal mounting b
and fairing block. Size, 7½
7½". For 12 VDC. Shpg. wt.,
17 A 6544 X...............

siness Band Radios and Amplifiers

Mobile 2-way Radio

5^{00} *Single-channel, 27-43 MHz*

ll. For in-plant 12-VDC
r base use with AC supply
Snap-in shock absorbing
for lift truck and other
Provision for paging, remote
nd tone squelch. Solid-state.
nnel, 27-43 MHz range. 3-
inal power (max. permitted
C low-power rules). With one
stals. **Specify Assigned Fre-**
⅝x6½x9¼". Allow 30 days.

CF. *Not returnable*....245.00
X. **AC Supply.** 5 lbs....34.95

1.6-watt Walkie-Talkie

375^{00}

Single-channel 132-174 MHz VHF-FM

Sonar 2301. All-silicon transistors for excellent operating stability. Compatible with VHF 2-way narrow-band systems. Receiver and transmitter usable on independent frequencies. 1.6 watts. Dual conversion. Electronic mode switching. FCC Type Accepted Parts 21, 89, 91, 93. One pr. crystals, 12 penlight batts. 7¾x3x1⅝". **Specify Your Assigned Frequency.** *Factory-shipped—allow 30 days for delivery.* Shpg. wt., 2½ lbs.
17 A 6523 F *Not returnable*.....375.00

5-channel 2.2-watt Walkie-Talkie

550^{00}

Kaar DP15. Hand-held FM 2-way portable radio provides direct voice contact between the man on foot and base station or other units. Many money-saving applications are possible in industry, commerce, public utilities, transportation and other fields. Plug-in circuit modules. Up to 5 channels in 132-174 MHz high-band range. 2.2 watts output. 1¾x3⅜x8$\frac{1}{16}$". With one pr. crystals. **Specify Assigned Frequency.** Allow 30 days. 2 lbs.
17 A 9850 CF. *Not returnable*....550.00
17 A 9851 F. Kaar Rechargeable Battery Pack. For above. 11 oz......40.00
17 A 9852 F. Kaar "153" Battery Charger. For above. Wt., 6 oz........84.00

M, SSB Linear lifiers

9^{00}

500" Series. Model 6904. Only 3 watts input de-
watts output. Drive/tune/load meter. Frequency
-40 MHz. Pi-network output to match 52-ohm
Internal antenna changeover relay. 6JG6 driver
26 tubes. **Illegal on 11-meter CB.** 6½x12x14½".
U. Shpg. wt., 36½ lbs....................329.00
U. **Model 6915.** (Not illus.) Above, but 150-watt
No meter. 4½x9½x12". 23 lbs...............189.00

Mobile and base Linear Amplifiers

119^{00} **Base**

Contex. Base mobile and AM/SSB amplifiers for 25-40 MHz provide up to 18 dB power gain; operate with less than 1-watt drive. Base unit (117 VAC) gives 100 watts maximum output; mobile unit (12 VDC) gives 60 watts output. Pi-network with double-grounded grid 6JG6A's in output stage. Antenna changeover relay. 4¾x6½x9½".
17 A 6953 X. 100-watt Base Model. Wt., 12 lbs.......119.00
17 A 6955 X. 60-watt Mobile Model. Wt., 10 lbs......129.00

bile Linear Amplifier

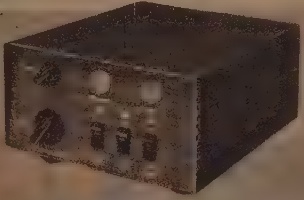
9^{00} *Operates on AM, FM, SSB*

ML-100. Covers 25-50 MHz.
on AM, FM or SSB. One to
drive required for 100-watt
d up to 60-watt output. Built-
na relay. Tuning light. Circuit
transistors and tubes. Draws
2 amps in receive position.
ernal connections needed.
d case, 7¼x8½x2¾". For 12
egal on Citizens Band Class D.
0 X. Shpg. wt., 7 lbs....99.00

175-watt Linear Amplifier

129^{00} *Up to 200 watts PEP on AM*

Courier BL-100. Business-band linear amplifier for 25-54 MHz. AM, FM and SSB. One to 15-watt drive input. 60 watts CW, 200 watts PEP on AM. Built-in antenna changeover relay. Semiconductor/tube circuit. Draws 55 watts in standby position. No internal connections to transceiver are needed. Size, 7⅜x7¾x5". For 117 VAC. **Illegal on Citizens Band Class D.**
17 A 6536 U. Wt., 10 lbs.......129.00



Mobile Linear Amplifier

119^{95} *For FM-AM and SSB-CW*

Hy-Gain Model 404 "Afterburner." Covers 25-50 MHz business band or Amateur 28 MHz (10-meter band for FM-AM and SSB-CW). With 1-15 watts RF drive power, gives 160 watts PEP output with approximately 80 watts carrier driven with 3.0 watts, 100% mod. 3¾x7x8". 12 VDC.
17 A 6520 X. Shpg. wt., 9 lbs....119.95
17 A 6521 X. Base Model 403. As above, but for 115 VAC. Wt., 9 lbs....97.97

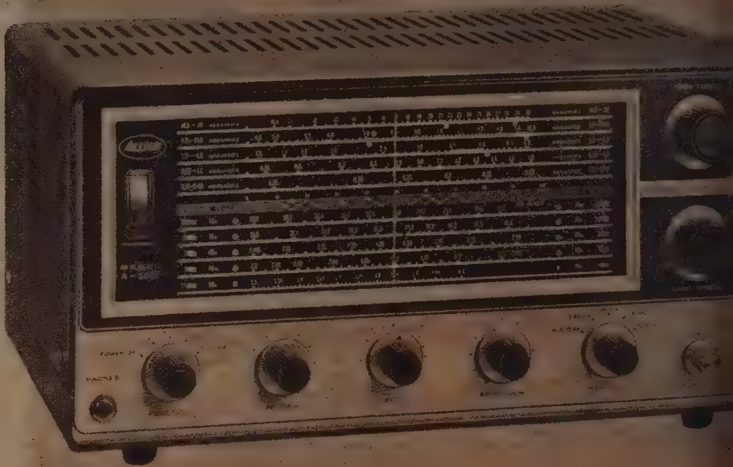
Allied® 5-band Amateur/SWL Receiver

Longwave and shortwave plus Amateur bands and standard AM

99^{95}

$5 monthly
See page 438

All solid-state circuit for superior reception and instant operation



Two FET's in front end . . high sensitivity with no crosstalk

Four mechanical filters for best selectivity with adequate bandpass

Dual power supplies for 117 VAC/12 VDC for base or mobile operation

Model A-2515. Keep in touch with the world or brighten your Ham shack with th versatile solid-state 5-band SWL/Amateur receiver. Gives you dependable rece tion of longwave and shortwave on four big bands, plus the standard AM ban Covers 150-400 kHz, 550-1600 kHz, 1.6-4.8 MHz, 4.8-14.5 MHz, 10.5-30 MH Receives all Amateur bands from 80 to 10 meters, international shortwave, forei broadcasts, aircraft and marine broadcasts, more. Choose your listening fro AM, CW, or SSB. Calibrated bandspread for 80 to 10 meters.

Solid-state circuit has two Field-Effect Transistors in the RF stage for hi sensitivity without overloading on strong signals. Large illuminated slide-rule di Four mechanical filters provide superior selectivity for good station separatio Has receiver muting connections. Dual power supplies—ideal for emergenc mobile, and field-day uses.

Noise limiter and automatic volume control reduce noise, blasting, and fadi Built-in variable BFO and Product Detector give clear reception of code a single-sideband. Illuminated S-meter for easy visual tuning. Push-pull aud output stage with thermistor for low distortion. Handsome gray metal cabin $7\frac{5}{8}$x15x10″. Vinyl cover. For 117 VAC or 12 VDC, negative ground. Order speake headphones, antenna below. From Japan.
17 A 6985 U. Shpg. wt., 20 lbs. . . . . .99.

SPECIFICATIONS

Ranges: Band A, 150 to 400 kHz; Band B, 550 to 1600 kHz; Band C, 1.6 to 4.8 MHz; Band D, 4.8 to 14.5 MHz; Band E, 10.5 to 30 MHz. *Sensitivity:* 2 μV for 10-dB S/N, 3.2 μV on standard AM broadcast band. *Selectivity:* 1.5 kHz bandwidth at 6-dB down; 5 kHz at 50-dB down. *Signal-to-Noise Ratio:* 30-d down. *IF Rejection:* 40 dB. *Intermedi Frequency:* 455 kHz. *Audio Power Ou put:* 1.3 watts. *Power Sources:* 117 VA 12 VDC (negative ground). *Power Co sumption:* 10 watts. *Semiconductors* transistors, 12 diodes, zener diode.

116^{50} **Receiver Outfit with everything you need for a complete listening post**

Separately, $122.80. Save $6.30 on this complete, sensitive receiving station for international and domestic listening. Contains everything needed for outstanding reception. Antenna system included builds up signal strength to help the sensitive receiver superbly capture the weak signals. Outfit consists of Allied A-2515 Solid-State 5-Band Amateur/SWL Receiver; Vinyl Cover (not shown); Matching Speaker; Deluxe Dual Headphones; Assembled Shortwave Antenna. All are matching components designed to provide stable, clear reception of longwave, shortwave, and standard broadcasts.
17 A 0024 L4U. Shpg. wt., 27 lbs. 116.50

Speaker and Accessories

Allied Matching Speaker. 3x5″ perm nent-magnet dynamic speaker crisp, clear sound reproductio Ruggedly constructed for long li sturdy steel case. Non-marring vi feet protect surfaces. Impedance, ohms. Housed in handsomely styl cabinet. Size, $7\frac{13}{16}$x$3\frac{9}{16}$x$5\frac{13}{16}$″.
17 A 6986 X. Shpg. wt., 3 lbs. . . . .9.

17 A 6226. Deluxe Dual Headphones. Lightweig Adjustable vinyl-covered headband. 8 oh Phone plug. Shpg. wt., 1 lb. . . . . .5.

17 A 9497 X. Deluxe Shortwave Antenna Kit. Eas to-assemble Mosley trap dipole. 39′ 10″ lon With 100-ft. 75-ohm twin lead. 3 lbs. . . . . . . .26.

17 A 8424 X. Low-Cost Fully-Assembled Shortwa Antenna. Covers 1.8-30 MHz range. $2\frac{1}{2}$ lbs. 6.

17 A 8625 X. Hy-Gain Window Antenna. $2\frac{1}{2}$ lbs. 9.

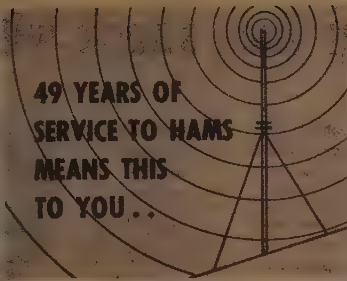
SHIPPING NOTE: Items with suffix U, W or Z in stock no. sent tr or express. See Ordering Information pa

get expert service

has served Amateurs with st equipment at economical since the earliest days of adio. To be sure that you right station equipment, write us for advice.

get special low prices

llied's Mail Order Amateur Department for a money-quotation on your Amateur or shortwave listening outfit more items).



Choose from the finest

Allied offers the best equipment available, outstanding both in performance and style, designed for rugged service and long life. All this and priced for top value to save you money.

*Buy with no money down

There is no need to wait for your equipment until you "save up" for it. Outfit your station on Allied's convenient Credit Fund Plan. *Full details on page 438.

ied professional 80-10 meter Ham Receiver

Speaker optional

)95

- Dual conversion • Crystal oscillator
- Solid-state VFO • Mechanical IF filter
- Product detector for excellent SSB
- Highly stable crystal-controlled BFO
- Preselector for sharp selectivity
- Double-gear antibacklash dial

A-2516. High-performance, plus the look and feel lity and elegance, combine to make this 80-10 receiver a welcome addition to any Ham shack. res the dependability of your contacts over longer es—an efficient receiver can make the big difference bility of communications.

ed to give top performance on all Ham bands be- 3.5 and 29.7 MHz, plus the frequency-standard on 10 MHz. AM, SSB, CW modes. Superior fre- stability is assured by a crystal-controlled first local or, and a solid-state VFO-type second oscillator negligible frequency drift. VFO has output ter- to allow its use as a transmitter VFO.

te antibacklash double-gear tuning dial reads down to 1 kHz; 28:1 dial-speed ratio makes tuning and velvet smooth. Mechanical IF filter provides an excellent 1.5-kHz bandwidth at 6-dB down, 6-kHz at 60-dB. Sensitivity is 1.5 μV for 10-dB S/N ratio at 14 MHz. Image ratio and IF rejection are better than 40 dB at 14 MHz. Product detector gives excellent SSB and CW reception. BFO is crystal-controlled for high stability and superior performance.

Has 8-ohm output terminals for external speaker; 500-ohm phone jack; 500-ohm output terminals for recording and RTTY. AVC and ANL give constant-level audio and quiet reception. Built-in S-meter calibrated in dB allows signal-strength evaluation and serves as tuning indicator. Built-in on-off switch for external calibrator.

Remote-control terminals provide easy connection to transmitter. One-watt audio power output gives good, solid reproduction. Size, 7x13x10". For 117 VAC. Japan.
17 A 6987 U. Shpg. wt., 18 lbs. 169.95

atching Accessories

A-2514 Matching 5" Speaker. ed Specially for reproducing frequencies. 7¼x7¾x7½".
988 X. Wt., 6 lbs. 19.95

Dual Headphones. Light- vinyl covered headband for t. Adjustable earpieces. Ear- ns remove for easy cleaning. e heavy-duty 5-foot cord, one plug. 8 ohms. Gray.
226. Shpg. wt., 1 lb. 5.95

in 5BDQ 80-10 Meter Meter t Antenna. Rated 1 kilowatt.
774 X. Wt., 10 lbs. 44.50

Amateur Receiver Outfit

Separately, $240.35. Save $40.40 on this complete Amateur receiving station. Contains everything needed to receive Amateur radio stations with superb clarity. Outfit consists of Allied A-2516 Professional-Quality 80-10 Meter Receiver; A-2514 Matching Speaker; Dual Headphones; Hy-Gain 5BDQ 80-10 Meter Doublet Antenna—this antenna assures excellent sensitivity for outstanding reception. All are matching components designed to work together for best performance.
17 A 0400 L4U. Wt., 35 lbs. . . . 199.95

Complete A-2516 Outfit

Save $40.40 **199.95** $10 monthly*

ow with Allied's convenient Credit Fund Plan

Upgrade your Ham shack with this gear

Shows time anywhere in the world at a glance

Convenient battery operation

Walnut-veneer wood cabinet

Allied Hamclock for world time

19^{95} *Operates for months on a single battery*

Model A-2527. Hamclock is a handsome as well as useful addition to any Ham shack. Gives you the exact local time, plus the time in any call-area or section of the world at a glance. Call areas and major cities are clearly marked on the clock face. Wood cabinet, 7$\frac{15}{16}$x6$\frac{1}{2}$x1$\frac{15}{16}$". Uses one "D" battery (order below). Japan.

17 A 6989 X. Shpg. wt., 1$\frac{1}{2}$ lbs. 19.95
18 A 5128. Alkaline "D" Battery. 10 oz. . . . . 63¢

Covers 80-10 meters with the most watts per dollar: 2000-W PEP 1000-W CW 600-W AM

495^{00} Gonset Linear Amplifier puts yo on the air with power to spar

Model GSB 201 MK IIIA. Put this powerhouse in your Ham sh for performance to "beat the band". Compact and self-c tained to allow easy placement on desk or table top. Bui power supply. Provides 2000 watts PEP for SSB; 1000 w input for CW; 600 watts input linear for AM. Can be drive exciter from 65 to 150 watts. Stable, efficient grounded- circuitry. Features full bandswitching with pi-network ou for 80, 40, 20, 15 and 10 meters. Panel switch allows tuneu low power. Large panel meter reads plate current or rels RF output—simplifies loading, monitors output. Bui antenna relay. 50-ohm nominal output impedance with S less than 3:1. Uses four 572B triodes; silicon diode rectif Metal cabinet, 12$\frac{5}{8}$x8$\frac{1}{2}$x12". 110/220 VAC.

17 A 6844 Z. Shpg. wt., 73 lbs. 49

Hammarlund Receivers for Hams and serious SWL's

General coverage Shortwave Receiver

249^{95} *Continuously tunable from 540 kHz to 30 MHz in 5 ranges*

Model HQ-200. Excellent communications receiver offers better than 0.5 μV sensitivity on CW and SSB; 1.0 μV on AM. 10 dB S/N. Tunes 540 kHz to 30 MHz in five bandswitched ranges; plus calibrated electrical bandspread for all amateur bands from 80 to 10 meters. Continuously variable selectivity from 12 kHz (AM), to 2.9 kHz (SSB) and 100 Hz (CW). Product detector with variable BFO. Q-multiplier operates independently of BFO. Accurate "S" meter, antenna compensator, AVC, noise limiter, headphone jack. Terminals for antenna, ground and speaker (order below). 8x16$\frac{1}{2}$x9$\frac{1}{8}$". For 117/230 VAC, 50-60 Hz.

17 A 9559 U. Shpg. wt., 26 lbs. 249.95
17 A 9560 X. S-101 Matching Speaker. 12 lbs. 19.95

Deluxe Receiver with crystal calibrator

519^{95} *Built-in 24-hour clock-timer and 100-kHz crystal calibrator*

Model HQ-180AC. Professional-quality receiver provides superb AM/CW/SSB reception from 540 kHz through 30 MHz in 6 bands. Bandspread for 80-10 meter Ham bands. Linear product detector, selectable sidebands. Operates triple conversion above 7.85 MHz, dual conversion below. Crystal-controlled 2nd converter. Selectivity adjusts from 500 Hz to 6 kHz. Crystal filter. Tunable slot filter for up to 60 dB attenuation. Sensitivity, 0.5 μV for 10:1 S/N ratio. Separate filament and accessory power supplies. Built-in 24-hour clock-timer. Illuminated "S" meter. 10$\frac{1}{2}$x19x13". Order speaker below. 117/230 VAC, 50-60 Hz.

17 A 9554 U. Shpg. wt., 48$\frac{3}{4}$ lbs. 519.95
17 A 9656 X. S-200 Matching Speaker. 12 lbs. 24.95

SHIPPING NOTE: Items with suffix U, W or Z in stock no. se or express. See Ordering Information p

Communications Receivers by Midland

Solid-state 4-band general coverage Shortwave Receiver tunes the world

49.95

$5 monthly*

- Tunes AM plus 2-30 MHz shortwave in 4 bands
- Lighted slide-rule dial
- BFO for code reception
- 9 transistors; 3 diodes
- Handsome black metal cabinet; has silver trim
- Built-in 4" PM speaker
- Modern rocker switches

1-500. Attractive appearance and good performance make this general shortwave receiver the ideal choice for beginners or casual shortwave . Provides complete communications coverage on four bands: standard adcast band and three shortwave bands; 2 to 5 MHz, 4.8 to 11.5 MHz to 30 MHz. You can listen to broadcasts from all over the world includ- as on 80, 40, 20, 15 and 10 meters and Citizens Band.

ance-engineered solid-state circuit comes on instantly, no waiting for . Large, easy-to-read slide-rule tuning dial is lighted for ease and con- in station selection. Bandspread lets you separate stations on crowded of the Ham or shortwave bands. BFO aids in listening to stations tting code. Receive/standby switch. Ferrite bar AM, wire SW antenna; ls for external SW antenna. Headphone jack. Built-in 4" speaker. Black abinet, 5⅜x12x4¾". 117 VAC. From Japan.

36 X. Shpg. wt., 5 lbs. 49.95

Put the world at your fingertips with these fine receivers

7-band Receiver

99.95

$5 monthly*

5-band Receiver

79.95

$5 monthly*

and FM-AM-SW-Aircraft-Police Receiver

el 11-530. Deluxe 7-band receiver provides extra- narily wide frequency coverage. Tunes standard and AM, 4-12 MHz and 12-22 MHz international twave, plus 108-137 MHz VHF aircraft band and 30-50 MHz and 144-174 MHz VHF police/public ice bands. Lighted slide-rule dial; fine-tuning con- Band indicator lights, power light. AFC prevents drift. Tone control. Built-in 5" speaker delivers , clear sound. Dual headphone jacks. Terminals for rnal antenna. Black vinyl-covered metal cabinet chrome trim. 5x13x8". 117 VAC. From Japan.

6687 X. Shpg. wt., 13 lbs. 99.95

Solid-state 5-band FM-AM-SW Receiver

Model 11-520. Feature-packed communications receiver tunes FM, AM and three SW bands: 2-5 MHz, 4.8-12 MHz, 11-30 MHz. Brings you exciting coverage of foreign broadcasts, Hams and CB'ers, as well as local FM and AM stations. Has lighted slide-rule dial, fine-tuning. BFO for code reception, AFC, tone control. Tuning meter helps pinpoint stations. Ferrite AM, line cord FM, wire SW antennas; terminals for external antenna. Jack for headphone or speaker. Tuner output; phono input. Black vinyl-covered cabinet, 7x14x8". 11 transistors, 6 diodes. 117 VAC. From Japan.

17 A 6688 X. Shpg. wt., 15 lbs. 79.95

Drake high-performance Ham Transceivers

599^{95} $25 monthly see page 438 *Includes crystals for full 5-band coverage*

Outstanding five-band SSB/AM/CW Transceiver covers the full 80-10 meter Ham bands

- **Instant USB/LSB selection on all 5 bands**
- **Automatic TR switching on CW for semi-break-in**

Model TR-4. High-performance, full Ham band coverage transceiver. Communication power 300 watts PEP on SSB, 260 watts shift carrier CW; 260 watts PEP on AM. Offers built-in VOX or PTT facilities, solid-state VFO with linear permeability tuning, controlled-carrier screen modulator for AM, CW sidetone oscillator, diode and product detectors, 100-MHz crystal calibrator, separate plate ammeter and S-meter, dial accuracy of 1 kHz, plus many other high-performance, quality features.

Two special 9-MHz crystal filters give instant USB/LSB selection on all 5 bands. Automatic transmit/receive switching on CW for semi-break-in. Impedance: 50 ohms pi-network output. Size: 5½x10¾x14⅜". Power supplies and accessories below.

17 A 9473 U. Shpg. wt., 19½ lbs.	599.95
17 A 9474 U. AC-4 115-VAC Supply. Wt., 16 lbs.	99.95
17 A 9475 U. DC-4 12-VDC Supply. Wt., 9 lbs.	125.00
17 A 9476 U. RV-4 Remote VFO/5" Speaker. 11½ lbs.	99.95
17 A 9487 U. MS-4 5x7" Matching Speaker. 9 lbs.	19.95
17 A 9478 X. MKK-3 Mobile Mount. Wt., 1 lb.	6.95

599^{95} $25 monthly see page 438 *Four IF bandwidtl all selectable wi front panel switc*

Compact 6-Meter Sideband Transceiver offe full coverage of 6-meter band plus MARS

- **Built-in PTT, VOX, ANTI-VOX, 100 kHz calibrat**
- **Excellent choice for any mobile application**

Model TR-6. Compact and lightweight for mobile use. In power: 300 watts minimum PEP on SSB, 300 watts F on AM, 300 watts CW. Full coverage of 6 meter band MARS: 49.4 to 54 MHz with accessory crystals; 49.9 t MHz with crystals supplied. Four selectable IF b widths: 2.4 kHz upper sideband, 2.4 kHz lower sideba 6 kHz AM, 0.3 kHz CW. Built-in PTT, VOX, ANTI-V 100 kHz calibrator, S-meter. Fast or slow AGC for rec ing. Automatic T/R switching. Dial calibration 1 kHz

FET front end, sensitivity of less than 0.1 µV for 10 S/N ratio on SSB. On-off switch for accessory n blanker. Meters read plate current, AGC action, and r tive power output. Sidetone with separately adjust volume provided for keyed CW. 5$\frac{7}{16}$x10¾x16$\frac{1}{6}$". Optional power supplies listed at left, accessories belov

17 A 9200 U. Shpg. wt., 16 lbs.	59
17 A 9201 U. RV6 Remote VFO. Shpg. wt., 11 lbs.	9
17 A 9744 S. CW Filter. Shpg. wt., 3 oz.	3
17 A 9745 S. LSB Filter. Shpg. wt., 3 oz.	2
17 A 9620. 9-NB Noise Blanker. Shpg. wt., 1 lb.	9

Add the convenience of this Station Console to your shack

299^{95} $15 monthly see page 438 *Built-in essentials and extras for versatile station operation includes digital clock and time*

Model C-4. Station control console coordinates operatic Provides a welcome addition to the up-to-date Amateur tion. Includes digital clock, timer which signals identificat intervals, phone patch (with volume compression), uni equipment control switching function, thru-line wattme and rotor control compatible with Ham-M motors. Inclu remote antenna switch (5-antenna capability) and po master for complete station power control from front pa (Antenna switch, power master not illus.) 5½x10¾x12

17 A 9202 U. Shpg. wt., 30 lbs. 29

SHIPPING NOTE: Items with suffix U, W, or Z in stock no. sent or express. See Ordering Information pa

Drake Ham Equipment and SW Receivers

29.00
2 monthly*

Low-cost SSB, AM and CW Receiver

289.00
$15 monthly*

International shortwave coverage

149.00
$8 monthly*

Ideal for novices and upper-class operators

riple-conversion Receiver

el 2-C. Sensitive SSB, AM and CW le-conversion receiver for Hams or e critical shortwave listeners. Cov- 80, 40, 20, 15, 10 meters in 500 ranges. VFO tuning; three band- ths of selectivity are available ivalent to three filters): 0.4, 2.4, kHz at 6 dB.

solid-state audio product and AM ctors; crystal oscillator; AVC ch (fast, slow, off); "S" meter; tubes and semiconductors. Rear- el jacks for antenna, speaker, ex- al muting and sidetone. 7x12x9". VAC. Matching speaker below.

9600 U. Wt., $13\frac{1}{2}$ lbs 229.00
9602 U. 2-CS Speaker. 7x10x9". g. wt., 6 lbs.................19.95

Deluxe Shortwave Receiver

Model SW-4A. Dual-conversion receiver with ultra-precision tuning; crystal lattice filter; solid-state VFO, AF output, and power supply; crystal oscillator; amplified AVC; "S" meter; VU meter; phone jack.

Covers 0.15-1.5, 6-6.5, 7-7.5, 9.5-10, 11.5-12, 15-15.5, 17.5-18, 21.5-22, 25.5-26 MHz. Crystals supplied. Frequency coverage incudes European LF, American MF, and International SW broadcast bands. Size: $5\frac{1}{2}$x$10\frac{3}{4}$x$12\frac{1}{4}$". For 120/240 volts, 50-60 cycle Hz AC. Shpg. wt., 19 lbs. Order matching speaker below.

17 A 9537 U.......................289.00
17 A 9487 U. Model MS-4 Speaker. $5\frac{1}{2}$x11x11". $8\frac{3}{4}$ lbs...............19.95

100-watt CW Transmitter

Model 2-NT. Quality constructed, easy-to-tune CW transmitter puts you on the air in style. Covers 3.5-3.8, 7-7.2, 14-14.25, 21-21.25, 28-28.5 MHz, crystal or separate VFO. Operates break-in, semi-break-in, or manual. Input, variable to 100 watts.

Automatic transmit switching puts transmitter on the air by closing key. Receiver-mute automatically silences receiver while you are transmitting. Spotting function lets you tune transmitter to receiver while not on the air. Low-pass TVI filter. Output impedance, 52 ohms. Size: $6\frac{9}{32}$x$9\frac{7}{8}$x$9\frac{9}{32}$". For 120 volts. 50-60 cycle Hz AC. Shpg. wt., 15 lbs.

17 A 9480 U..........................149.00

750.00 $31 monthly*

Adds power for serious DX work in your shack

850.00 $35 monthly*

Combination unit offers convenient operation

Linear Amplifier for 80-10 meter bands

el L-4B. 2000 watts PEP on SSB; 1000-W DC on CW, , RTTY. Drive: 100-W PEP on SSB; 75-W on CW, , RTTY. AGC. Internal antenna change-over relay. t-in blower. Vernier-drive plate tuning control. Two -band meters read plate current, grid current, plate age, forward, reflected RF power. Input/output imance: 50 ohms, adjustable pi-network output. Two 3- tubes. $7\frac{7}{8}$x14x$14\frac{5}{16}$". With separate solid-state power ly, $7\frac{7}{8}$x$6\frac{3}{4}$x11". 115/230 V, 50-60 Hz AC.

9605 Z. Shpg. wt., 85 lbs.........................750.00

R-4B Receiver, T-4B Transmitter in one case

Model TR-44B. Tunes 3-30 MHz, except 5-6 MHz. Transmitter must be crystal-controlled at 11-11.5 MHz. Receiver tunes 1.5-30 MHz. Provision for ten crystal-controlled channels, ten 500 kHz tunable ranges with 1-kHz accuracy. Power input: 120-W PEP on SSB and AM, 120-W DC on CW. 0.5 µV at 10 dB S/N. Amplified fast, slow AVC. Antenna impedance: 52 ohms. $11\frac{1}{2}$x$10\frac{3}{4}$x$12\frac{1}{4}$".

17 A 9471 U. Shpg. wt., 30 lbs.......................850.00
17 A 9474 U. Model AC-4 110/220 VAC Supply. 16 lbs...99.95
17 A 9475 U. Model DC-4 12 VDC Supply. 9 lbs..........125.00

e page 438 for full Credit details

Drake pace-setting Amateur Equipment

200-watt Transmitter

449^{00}
- 160-10 meters
- SSB, AM, CW, RTTY
- Transceive switch

Model T-4XB. Get great performance with this fine transmitter. Covers 80, 40, 20, 15 meters, 28.5-29 MHz of 10-meter band, and 160 meters with accessory crystal. Also available are 500 kHz ranges between 1.8-30 MHz. Power Input: 200 watts PEP on SSB and AM, 200 watts DC on CW. Has solid-state VFO. USB/LSB selection. Semi-break-in on CW; sidetone. AGC, VOX, PTT. Relative output/plate-current meter. High-impedance mike input. 52-ohm adjustable pi-network. Size, 5½x10¾x11⅝". Takes power supplies below. Shpg. wt., 20 lbs.
17 A 9231 U. 449.00

17 A 9474 U. 110/220 V, 50-60 Hz AC Power Supply. Shpg. wt., 22 lbs. . 99.95

17 A 9475 U. 12-VDC Power Supply. Shpg. wt., 9 lbs. 125.00

Dual-conversion Receiver

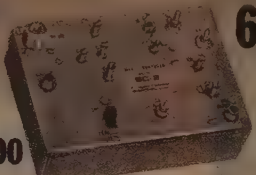
430^{00}
- 160-10 meters
- SSB, AM, CW, RTTY
- Transceive capability

Model R-4B. Designed for top performance, this dual-conversion receiver boasts excellent sensitivity. Covers 80, 40, 20, 15 meters, 28.5-29 MHz of 10-meter band, 160 meters, and any ten 500-kHz ranges between 1.5 and 30 MHz with accessory crystals. Solid-state VFO. Four bandwidths of 0.4, 1.2, 2.4, and 4.8 kHz. Off/on, fast, slow AVC. Transceive capability. 25-kHz calibrator allows you to work closer to band edges. Sensitivity: 0.5 μV for 10 dB quieting. Input Impedance: 52 ohms. Size, 6x11x11". For 120/240 VAC. Takes speaker below.
17 A 9498 U. Wt., 19¾ lbs. 430.00

17 A 9487 X. MS-4 Matching 5x7" Speaker. Shpg. wt., 8¾ lbs. 19.95

17 A 9232 U. T-4B Transmitter. Transceives with R-4B. 6x11x11". . . . 395.00

300^{00}



69^{00}

Two-meter 180-watt-input Transmitting Converter

Model TC-2. For use with any Drake exciter without requiring additional power. Usable with other exciters when powered by an AC-3 or AC-4 supply. Covers 143.9-148 MHz. Requires only 0.25-volt drive at 13.9-18 MHz. Operates SSB, CW, AM, RTTY, depending on exciter modes. 180 watts PEP input on SSB and AM, 180 watts DC on CW and RTTY. Has final-plate-current/relative-power output meter and built-in antenna relay. Output Impedance: 52 ohms, adjustable output network; SWR 2:1. Plate, load, function, range, meter controls on panel. 5½x7⅝x11⅝".
17 A 6697 U. Shpg. wt., 9 lbs. . . 300.00

17 A 6698 U. TC-6 Six-Meter Transmitting Converter. Shpg. wt., 9 lbs. 250.00

Solid-state two-meter Receiving Converter

Model SC-2. Converts any general-coverage receiver to 2 meters. Covers 144-148 MHz. IF, 14-18 MHz. Two switch-selected crystals for reception of 144, 145 MHz segments of band for limited-coverage receivers. Impedances, 50 ohms. Gain, nominally 20 dB. Output for transceive operation. Calibrator input. Needs 18 VDC at 40 mA. 6⅜x4³⁄₁₆x2½"
17 A 9610. Shpg. wt., 2 lbs. 69.00

17 A 9615. SC-6 Converter. Above, but covers 6 meters. Wt., 2 lbs. 64.50

17 A 9619. Power Supply. Delivers 18 VDC at 100 mA. Wt., 1½ lbs. . . 17.95

17 A 9622. SCC-1 100-kHz Crystal Calibrator. Usable to 432 MHz. Requires 18 VDC at 20 mA. Wt., 1 lb. . . . 24.50

17 A 9623. CC-1 Console. 6 lbs. . . . 24.50

Ameco Ham Equipment for novice or old timer

6- and 2-meter Transmitter

159^{95}
- 75 watts input
- Uses 621 VFO

Model TX-62. Get in on the 6, 2-meter fun with this 2-band transmitter. Covers 50-54 and 144-148 MHz. 75-watt CW, peak AM input. Broad-banded, tunable final plate; tunable loading capacitors. Solid-state supply. Meter for final cathode and grid currents, relative RF output. Audio gain control. Jack for mike, key; connections for key and relay. Takes 8-MHz crystals or VFO. 6x11½x9½". 117 VAC. Shpg. wt., 21 lbs.
17 A 6321 U. 159.95

General-coverage Receiver

99^{95}
- Solid-state
- 540 kHz-54 MHz

Model R5A. Excellent broad-coverage receiver for shortwave listener or Ham. Continuously tunes 540 kHz-54 MHz in 5 bands. Covers standard AM broadcast, Amateur, and foreign bands; 27-MHz CB channels; 2-way radio from 30-50 MHz, including police and fire broadcasts. Bandspread tuning. ANL and BFO. Size, 6x12x9". For 117 V, 60 Hz AC. Shpg. wt., 12 lbs.
17 A 6328 U. 99.95

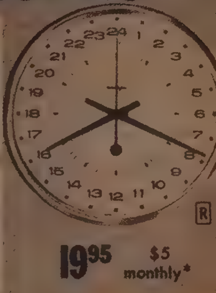
VFO for 6, 2, 1.4 meters

64^{50}

Model 621. Solid-as-a-rock VFO for quick frequency changes with excellent stability. Covers 50, 144, 220 MHz. For transmitter using 8-MHz crystals. 6x5x7½". 117 VAC. Shpg. wt., 7 lbs.
17 A 9046. . . . . 64.50

Values in Amateur Station Accessories

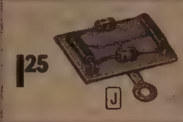
59^{50}
$5 monthly*
A

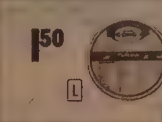


Pkg. of 4
1^{75}
D

24^{25}
$5 monthly*
E

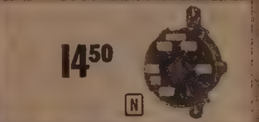
34^{95}
Model TE 7-02
H

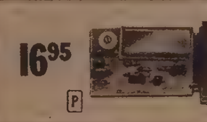




S
59^{95}
$5 monthly*

135^{00}
$7 monthly*
M





Seiko World-Time Calendar Watch. Stainless steel, 17-jewel, automatic-nding wrist watch with link brace-t. Waterproof. Shows GMT, local, orld time. Has second hand, 24 and -hour dials. Japan.
A 9413 S. Shpg. wt., 3 oz.....59.50

Mastercrafters 191 Clock. 24-hour dial. 8" chrome case. Shows world me. For 110 V, 60 Hz AC.
A 8472. Shpg. wt., 1½ lbs. 8.95
A 8475. Walnut-grain metal...8.95

Pennwood 100-24H Direct-Reading 24-Hour Clock. Digital-readout dial ows hours and minutes. Ideal for curate log-keeping. Ebony. 4x7¾x4". 0 V, 60 Hz AC operation.
A 8474. Shpg. wt., 5 lbs........15.00

Four PL-259 Coaxial Connectors. MIL type. New—not replated. 8 oz.
A 6643..............Pkg. of 4 for 1.75

Hy-Gain LA-1 Coaxial Lightning Arrester. Has SO-239 fittings; flange. or 52 or 72 ohms. Needs ground. 1 lb.
A 6566..........................24.25

Tunable Car Alternator Noise Filter. Attenuates noise in alternator-uipped cars. Body, 3x1⅝" dia.; has " mtg. holes on 2¾" ctrs. 8 oz.
A 8980..........................9.45

G **Hy-Gain BN86 Balun.** Takes up to 2 kW PEP, from 3-30 MHz. 1:1 transformation ratio. For any 52-ohm balanced antenna system. Weather sealed. Mounting hardware for 1⅜" to 2⅜" dia. boom or mast. 2 lbs.
17 A 8240..........................14.95

H **Omega-t Model TE 7-02 Antenna Noise Bridge.** 1-300 MHz. Measures impedance, frequency with receiver. Battery.
17 A 6878. Shpg. wt., 8 oz........34.95
17 A 6879. TE 7-01. 1-100 MHz..24.95

J **Ameco HP-45 High-Pass TVI Filter.** Rejects everything below 45 MHz. For 300 ohms. Shpg. wt., 3 oz.
17 A 8463..........................1.25

K **Magnetic Mike Clip.** Mobile use.
17 A 6461. Shpg. wt., 3 oz.....79¢

L **Electro-Voice DX Calculator.** Circular calculator puts DX data at your fingertips. Shows time differences, beam headings, postal rates, DX zones, much more. 10½". Wt., 4 oz.
17 A 8650..........................1.50

M **Waters 334A Dummy Load/Wattmeter.** 2-230 MHz. VSWR, 1.3:1. 52 ohms. 0-1000W. 4¾x9x10¼".
17 A 6891 X. Shpg. wt., 15 lbs..135.00
17 A 6892 X. 384 Dummy Load. 50W. 52 ohms. 4¾x9x10½"..........65.00

N **Waters Protax 375 Coaxial Switch.** 6-position. VSWR, 1.2:1. Negligible insertion loss. Grounds antenna when not in use. Mounts behind panel. Escutcheon has provision for erasable markings. Hardware, knob.
17 A 6875. Shpg. wt., 2 lbs......14.50
17 A 6876. 376. Above, 5-position.13.95

P **Petersen Radio PR-100A Precision 100-kHz Transistor Oscillator.** Checks harmonics at 100-kHz intervals through 54 MHz. Requires 6 or 12 VDC at 4-6 mA. Plug-in socket.
17 A 6458. Shpg. wt., 1 lb........16.95

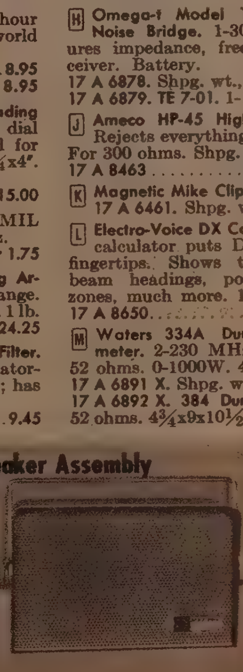
R **Mastercrafters 2405C Electric 24-Hour Clock.** White 12" dial; black hands, numerals; red sweep hand. 13½" dia. chrome-finish case. Self-starting. 117 VAC. U.L. Listed.
17 A 8470 X. Shpg. wt., 5 lbs....19.95
17 A 8471 X. **Mastercrafters 2405G Clock.** Similar to above, but gray case. Shpg. wt., 5 lbs...................17.95

S **Wall World-Map/Clock.** Combines clock and world map in walnut frame. Checks time in 70 of the world's major cities. Adjustable, enlarged indicator for local-standard and daylight time. 15x22x5". 110-115 volts, 60 Hz AC. Wt., 5 lbs.
17 A 9412 U..........................59.95

Mobile or Indoor Speaker Assembly

Swivel gimbal-type mounting bracket

15^{00}

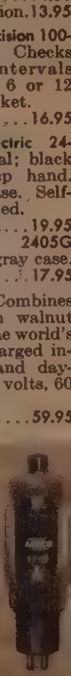


fficient 4x6" speaker in comact aluminum cabinet. Peaked or 300-3000 Hz; provides crisp esponse. Impedance, 3.2 ohms. wivel gimbal-type mounting racket. Screw terminals. With ounting hardware.
7 A 9078. Wt., 3 lbs.......15.00

572B/T160L SSB Power Triode

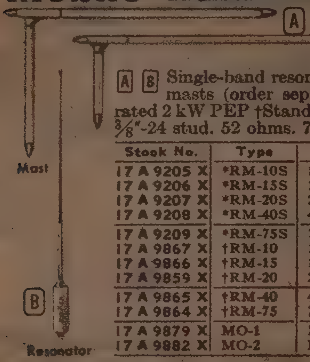
Replaces 811A, but dissipates 2½ times more plate power

17^{95}



Ideally suited for grounded-grid instant-on, no-warmup linear amplifiers. As replacement for 811A it provides greater peak power capability, longer life. Compact envelope, rugged graphite anode, durable bonded thoriated tungsten filament. Zero bias, low voltage.
17 A 9079. Shpg. wt., 1 lb..........17.95

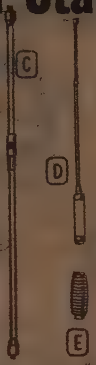
Mobile Ham Antennas and Station Accessories



New-Tronics Hustlar Mobiles

A B Single-band resonators and foldover 54-in. masts (order separately). *Super Hustler rated 2 kW PEP †Standard Hustler, 400 W PEP. ⅜"-24 stud. 52 ohms. 75-97" high. Wt., 1½ lbs.

Stock No.	Type	Description	EACH
17 A 9205 X	*RM-10S	10-meter resonator	11.50
17 A 9206 X	*RM-15S	15-meter resonator	13.50
17 A 9207 X	*RM-20S	20-meter resonator	15.50
17 A 9208 X	*RM-40S	40-meter resonator	19.50
17 A 9209 X	*RM-75S	75-meter resonator	24.50
17 A 9867 X	†RM-10	10-meter resonator	7.95
17 A 9866 X	†RM-15	15-meter resonator	8.95
17 A 9859 X	†RM-20	20-meter resonator	9.95
17 A 9865 X	†RM-40	40-meter resonator	11.95
17 A 9864 X	†RM-75	75-meter resonator	13.95
17 A 9879 X	MO-1	Mast for fender mtg.	10.75
17 A 9882 X	MO-2	Mast for bumper mtg.	10.95



Hy-Gain Hamcat Antenna and "Quick Changers" Coil and Tip-Rod Assemblies

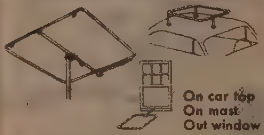
C **257 Hamcat Antenna.** High Q, wide-band. Rated to handle the power of any mobile Ham transceiver. Features foldover hinge, swivel base, ⅜-24 thread. Impedance, 52 ohms.
17 A 8290 X. Shpg. wt., 5½ lbs. 12.95

D **Coil and Tip-Rod Assemblies.** One-piece. Coils sealed in epoxy fiberglas sleeve. For Hamcat antenna. Wt., 3½ lbs.

17 A 8291 X. Model 252, 75 Meters. . 14.95
17 A 8292 X. Model 256, 40 Meters. . 12.95
17 A 8293 X. Model 255, 20 Meters. . 10.95
17 A 8294 X. Model 254, 15 Meters. . . 9.95
17 A 8295 X. Model 253, 10 Meters. . . 8.95

E **Model 492 Spring.** For above.
17 A 8296 X. Shpg. wt., 6 oz. 2.80

Squalo half-wave Antenna



Cush-Craft ASQ-6. Full half-wave, horizontally-polarized, omnidirectional 6-meter antenna. The square shape allows full electrical length in compact dimensions. Only 30" square. Direct 52-ohm Reddi Match feed. Complete with rubber suction cups for car top and support for mast.
17 A 8286 X. Wt., 6 lbs. 15.95
17 A 8287 X. ASQ-2. 2 meters, 10" square. 2½ lbs. 11.95

Certificates for Amateur and special-purpose Crystals

FT-243/Z9C Type. Pin spacing, 0.486". Pin diameter, 0.093". Tol. ±0.002%. Supplied within ±5 kHz. *Frequencies available: 1800-2000 kHz, 3500-4000 kHz, 6740-6800 kHz, 7000-7334 kHz, 8000-8229 kHz, 8330-8449 kHz.*
17 A 8175 S. Crystal Certificate. . . . Ea. 2.95

Type HC6/U. Low-current types. Pin spacing, 0.486". Pin diameter, 0.050". *1.8-54 MHz. ±0.002%*
17 A 8176 S. Crystal Certificate. . . . Ea. 4.95

Allied mails you a Crystal Certificate card to fill out for each frequency. Return completed card, and crystal will be shipped to you within 30 days.

Frequency-Standard Crystals. Wt., 3 oz.
17 A 9384 S. Type HC13/U. 100 kHz. . 6.95
17 A 9385 S. Type HC6/U. 1000 kHz. . 7.95

Ameco nuvistor Converters and Preamplifiers

14⁹⁵
S
W
34⁹⁵
T
59⁹⁵

S **Ameco PV-50 Nuvistor 6-Mete Preamp.** Boosts gain and reduces noise when used ahead of your converter, receiver, or transceiver Uses 6CW4 high-gain nuvistor Two tuned circuits for good imag and spurious-signal rejection. Gain over 20 dB. Requires 100-150 V a 10 mA, 6.3 V at 150 mA. 2½x2 3¼". Shpg. wt., 1 lb.
17 A 9692. 14.9

Ameco PS-1W Power Supply. (No illus.) 110 VAC. For PV-50, CN-144 W. 2½x4½x4½". Wt., 4 lbs
17 A 9695. 13.9

T **Ameco PT All-Band Frame-Gri Preamp.** A 6-160 meter pream for use with transceivers. Continuous tuning. Frame-grid pentode handles strong signals, maintains low noise level. Greatly improves receiver sensitivity. Transfe circuit bypasses preamp durin transmission. Provision for feedin antenna input of, and muting, second receiver. 5½x3¼x3". 110-120 V, 50-60 Hz AC. Wt., 5 lbs.
17 A 9689. 59.9

W **Ameco PCL-P Nuvistor All-Banc Preamp for 6 Through 160 Meters** Two nuvistors in cascade for nois figures of 1.5 to 3.4 dB, dependin on band. Boosts weak-signal performance of any receiver. Overal gain, better than 20 dB. Built-in power supply for 110-120 V, 50-60 Hz AC. Size, a compact 5½x3¼x 3". Shpg. wt., 2 lbs.
17 A 6612. 34.9

Useful Amateur station and antenna Accessories

F
G
H
J
K
L
M
N
P
R

F **Hy-gain C1 Center Insulator.** For doublet antennas. Takes ¼-in. or ⅜-in. coax. Less insulators below.
17 A 8351. Shpg. wt., 1 lb. 4.95

F **17 A 6249. End Insulators.** 7-in. long. Less C1 above. 1 lb. . . . . **Pair 2.95**

G **Johnson 250-23-3 Matchbox.** 52 ohms to 25-1500 ohms balanced, 25-3000 ohms unbalanced. SWR meter. TR relay. Rated 750 W PEP. Wt., 15 lbs.
17 A 9527 X. 94.95

H **Bud LF-601A Low-Pass Filter.** Rated 1 kW, 80-10 meters. Cutoff at 42 MHz. 52-72 ohms.
17 A 8457. Shpg. wt., 3 lbs. 23.60

J **Cush-Craft "Blitz-Bug" Coax Lightning Arrester.** Type 83 connectors.
17 A 8044. Shpg. wt., 4 oz. 3.95

K **Drake TV-1000-LP Low-Pass Filter.** Rated 1 kW, 80-10m; 200 watts on 6m. Cutoff at 52 MHz. 52-ohms.
17 A 8455. Shpg. wt., 2 lbs. 16.95

L **Johnson 250-20 Low-Pass Filter.** Rated 1 kW, 80-10 meters. 4 lbs.
17 A 9525. . . . . 14.95

M **Johnson 250-39 TR Switch.** Switches antenna between receiver and transmitter. Rated 4 kW. Needs no tuning. Coax fittings. For 115 V, 50-60 Hz AC. Shpg. wt., 5 lbs.
17 A 8305. . . . . 29.95

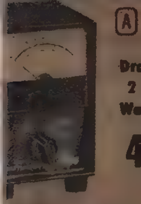
N **Bumper Mount.** Stainless steel. Fits any size bumper. No holes to drill. Shpg. wt., 3 lbs.
17 A 6606X. 7.50

P **Body Mount.** Durable stainless steel mounting with standard ⅜"-24 fitting. Shpg. wt., 3 lbs.
17 A 6607. . . . . 8.50

R **Heavy-Duty Stainless Steel Whip Spring.** For any size whip antenna. Standard ⅜"-24 fittings. Will keep its tension with the roughest use.
17 A 6609. Shpg. wt., 2 lbs. 7.50

Buy with no money down . . full Credit details on page 438

xed Ham Antennas and Station Accessories



Drake W-4 2 kW RF Wattmeter 49^{50}

Drake MN-4 Coupler 90^{00}

Get maximum power into your antenna with these quality Accessories

ake W-4 RF Wattmeter. Measures forward and reflected wer, and reads it in watts. Conversion to VSWR nomogram. Has two scales in each direction: 200 and watts full scale. Accuracy, 5%. Impedance, 50 ohms; gible insertion loss. 5½x3¾x4".
8245 X. Shpg. wt., 4 lbs. 49.50
8248 X. WV4. 100 and 1000-W VHF. 73.50

ake MN-4 Matching Network. Matches transmitter to ur antenna for low SWR and more power. Has built-in R meter and RF wattmeter. Covers 10-80 meter Ham s. Handles 200 watts. 5½x10¾x8".
8246 U. Shpg. wt., 5 lbs. 90.00
8247 U. Above, but 2000 watts PEP. 10 lbs. . . .175.00

17^{95}

meco BIU Bridge Indicator Unit

, percentage of power, percentage of ge on 3 scales when used with Model below or other bridge. 100-μA, 2⅛" e meter. 3x5x2¾".
9082. Shpg. wt., 1 lb. 17.95

11^{95}

seco SWB Standing Wave Bridge

from 1.8-225 MHz. 1 kW. Can be line. No line loss. With two SO-239 ectors. 2¼x4½x1⅝".
9081. Shpg. wt., 1 lb. 11.95

loss Coaxial Cable . . . foam polyethylene dielectric

8^{50} 50' Coil

Handles up to 2 kW PL-259's each end

-quality RG-8/U cable at exceptionow cost. Ideal for Ham or CB'er. ires low-loss foam polyethylene inion for minimum attenuation at high encies; premium Type II, nonconnating PVC jacket that even allows l. You'll get more power to your an- and better performance by replacour old, higher loss line. 50-ohm imace; handles up to 2000 watts of below 30 MHz. Tough, long-life her-resistant black vinyl jacket. Amol PL-259 connector at each end.
8519. 50-ft. Coil. Wt., 7 lbs. 8.50
8522. 100-ft. Coil. 14 lbs. 13.95

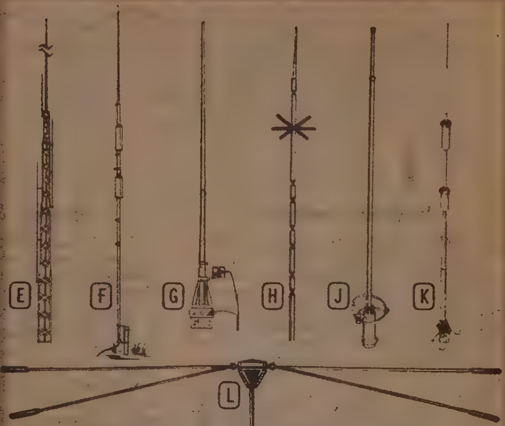
ermetically sealed nonreactive Dummy Antennas

14^{95}

entec 525 Dummy Antenna. Allows ansmitter adjustment under condi- duplicating actual antenna load. pates transmitter output power as Prevents radiation and eliminates QRM, and other such problems transmitter is being tuned. Transer can readily be peaked for top DX ation. Nominal impedance 50 ohms. rs 0-220 MHz with SWR of less than . Rated 125 watts steady state, 250 s ICAS. Mounting brackets designed egligible heat transfer. Fins and ribs surface temperature. 5x4¼x4½". 39 connector.
9436 X. Shpg. wt., 1¼ lbs. 14.95

A 9437 X. **Gentec 510U.** Above, but 0 watts steady state, 1000 watts S. 6¼x5¼x6½". Wt., 4 lbs. . . .24.95

24^{95}



Popular Multiband Antennas

E Hy-Gain 18-HT "Hy-Tower" for 10-80 Meters. 50-feet high. Power rating well over legal limit. X-braced. Stub decoupling. Impedance, 52 ohms. With base insulators. Requires coax and ground rod.
17 A 8769 ZW. Shpg. wt., 108 lbs. 164.95

F Hy-Gain 14AVQ Trap Vertical for 10-40 Meters. Improved successor to the popular 14AVS. Has low-angle radiation pattern for outstanding DX performance. Traps are encased in solid-aluminum housings. Heavy-gauge seamless aluminum radiator; noncorrosive full-circumference clamps at tubing joints; 12" double-grip mast bracket assures maximum rigidity whether rooftop or ground mounted. Antenna is at DC ground for low noise, positive lightning protection. 1 kW. 52 ohms. Height 18 feet. Needs coax, ground rod.
17 A 8765 ZW. Shpg. wt., 10 lbs. 35.95

F Hy-Gain 18-AVQ Trap Vertical for 10-80 Meters. Easily-erected 32-ft. vertical gives outstanding DX performance. Has four separate tuned traps, factory peaked for top coverage. One kW AM, two kW PEP. 52 ohms. Requires coax, ground rod.
17 A 9295 ZW. Shpg. wt., 15 lbs. 67.50

G Hy-Gain 18-V Trapless Vertical for 10-80 Meters. Low-cost 18-ft. vertical tunes 10-80 meters by changing coil taps. Heavy aluminum-tubing radiator, heavy base insulator. 52 ohms. Requires coax.
17 A 6043 X. Shpg. wt., 5 lbs. 19.95

H New-Tronics 4BTV Vertical for *80-10 Meters. Aluminum. Precisely tuned hi-Q traps. Rated 1 kW. Tunable. 19'8" high. 52 ohms. SWR 1.5:1. *80 meters with RM-75S resonator, facing page. Requires coax.
17 A 9489 ZW. Shpg. wt., 15 lbs. 42.95

J Cush Craft AR-2 Vertical for 135-175 MHz. Perfect for monitor receivers. Gain, 3.75 dB. Preassembled of heavy-wall aluminum tubing; fitting for standard coax connector. Fits up to 1⅜" masts. Chart for adjusting to frequency. Requires 52-ohm coax.
17 A 8288 X. Shpg. wt., 5 lbs. 12.50

K Mosley RV-4C Trap Vertical for 10-40 Meters. Features heavyduty aluminum construction. Includes radials. Easily handles full kilowatt of power. Height, 22 feet. Impedance, 52 ohms. Requires coax.
17 A 9488 ZW. Shpg. wt., 10¼ lbs. 38.23
17 A 9495 X, **RKV-345 Roof Mounting Kit.** 3 lbs. 4.21

L Hy-Gain HD-4 Single-Band Doublet. 80-meter doublet with cutting instructions for 10-40 meters. Rated 500 watts. With copper-clad wire, insulators, hardware, 50 ft. of RG-58/U coaxial cable.
17 A 6171 X. Shpg. wt., 3¼ lbs. 9.95

Hy-Gain 5BDQ Multiband Doublet for 10-80 Meters. (Not illus.) Rated 1 kW. Requires coax.
17 A 8774 X. Shpg. wt., 10 lbs. 46.50

Selected Amateur Beams, Towers, Accessories

Hy-Gain Antennas

[A] Hy-Quad Tri-Bander Quad. 10-15-20 meter, 2-element quad features heavy-duty all-aluminum structure, aluminum stranded wire, Cycolac® spreader insulators, individually tuned gamma match on each band, single feed-line for all three bands. Requires no tuning stubs, traps, loading coils, or baluns. Has extra-heavy-duty tilting boom-to-mast clamp for 1¼" to 2½" masts. Gain, 8.5 dB. F/B Ratio, 25-35 dB. VSWR, 1.2:1. 52 ohms. 1 kW. Spreader Length, 25′5″. Boom Diameter, 2″. Turning Radius, 13′6″.
17 A 8343 ZW. Shpg. wt., 42 lbs. **99.95**

[B] TH-6DXX "Super Thunderbird Tri-Bander." 1-kW beam. Improved version of TH-6DX. Gain, 8.7 dB on 10, 15, and 20 meters. "HY-Q" traps. Boom, 24 ft. Longest element, 31 ft. Turning Radius, 26 ft. *Requires CDR HAM-M Rotator (right).* 60 lbs.
17 A 6605 ZW.......................**164.95**

TH3MK3 "Thunderbird Tri-Bander." (Not illus.) Three-element beam for 10, 15, and 20 meters. Improved version of TH3MK2. Handles maximum legal power. 14-ft. boom; longest element 28 ft. Turning radius 14′8″. 36 lbs.
17 A 8755 ZW.......................**132.95**

Mosley Antennas

[C] TA-33 Beam. World famous 3-element Trapmaster for 10, 15, and 20 meters. Turning Radius, 15′6″. 1 kW.
17 A 8348 ZW. Shpg. wt., 41 lbs. **133.10**

[C] TA-33 Jr. Beam. 300-watt version of TA-33. Turning Radius, 14′9″.
17 A 8787 ZW. Shpg. wt., 28 lbs. **92.75**

[D] MP-33 "Tig-Array" 3-Element Beam. 750 watts AM, 2 kW PEP on 10, 15, and 20 meters. Gain, 8 dB. SWR, 1.5:1. Turning Radius, 15 ft.
17 A 8330 ZW. Shpg. wt., 28 lbs. **105.45**

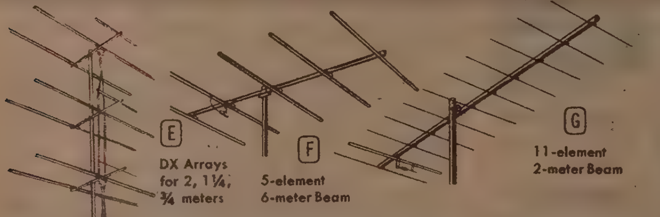
17 A 8328 X. TA-40KR 40-Meter Converter Kit. For MP-33, Classic 33. Shpg. wt., 10 lbs.......................**56.90**

CLASSIC BEAMS

All the features of famous Mosley Trapmasters plus new CLASSIC balanced capacitive matching feed system. 1 kW on 10, 15, and 20 meters. *Require CDR HAM-M Rotator.*

[C] Classic 33 Beam. Three elements. Boom, 18 ft. Longest Element, 27 ft. Turning Radius, 16 ft.
17 A 9496 ZW. Shpg. wt., 47 lbs. **145.15**

Classic 36 Beam. (Not illus.) Six elements. Boom, 24 ft. Longest Element, 29¼ ft. Turning Radius, 19¼ ft.
17 A 8349 ZW. Shpg. wt., 71 lbs. **171.92**



Cush-Craft high performance VHF Antennas

[E] 20-Element DX Arrays. Combine the best of yagi and collinear features to give you advanced-design VHF and UHF antenna arrays for 2, 1¼, or ¾ meters. Feature broadband coverage and low-angle radiation. Excellent forward gain of 14.2 dB; front-to-back ratio of 20 dB. VSWR at frequency, 1:1. Full kW (2 kW PEP). Installs on up to 1½" masts.

17 A 8550 X. Model DX-120. Covers 2 meters (144 MHz). 118x75x30″. Turning Radius, 48″. Wt., 8 lbs.......**29.50**

17 A 8551 X. Model DX-220. Covers 1¼ meters (220 MHz). 78x53x20″. Turning Radius, 32″. Wt., 7 lbs.......**22.50**

17 A 8552 X. Model DX-420. Covers ¾ meter (432 MHz). 42x29x11″. Turning Radius, 18″. Wt., 6 lbs.........**17.50**

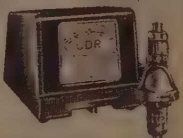
[F] A50-5 6-Meter Beam. Five-element, all-aluminum 50-MHz beam provides 9.5 dB gain, excellent pattern control, and high F/B ratio. Mounts horizontally or vertically. Boom, 12′. 52 or 72 ohms. For masts up to 1⅝″.
17 A 9572 ZW. Shpg. wt., 14 lbs. **29.50**

17 A 9573 X. A55-SK Stacking Kit. For stacking two A50-5 beams. Adds 3 dB. Shpg. wt., 2 lbs.............**11.95**

[G] A144-11 2-Meter Beam. Eleven-element aluminum array provides 13 dB gain, 28 dB F/B ratio. Can be mounted horizontally or vertically. Boom, 12′. Solid elements. Driven element for direct 52 or 72-ohm coaxial feed. For masts to 1½″.
17 A 9574 ZW. Shpg. wt., 8 lbs...**16.95**

17 A 9575 X. All-SK Stacking Kit. For stacking two A-144-11's. 2 lbs..**11.95**

CDR Beam Antenna Rotator Systems



TR-44 Series III Rotator

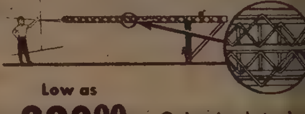
69⁹⁵

CDR TR-44. Rotator has 48 heavy-duty bearings in two 6½″ ball races. Average torque 450 inch-pounds. Indicator calibrated in compass points and 3° increments. Readable with motor off. For masts up to 2ⁱ⁄₁₆″ O.D. Order 8-conductor cable below. For 110-120 V, 50-60 Hz AC. Shpg. wt., 19 lbs.
17 A 9481 X.......................**69.95**

CDR HAM-M. (Not illus.) Extra-heavy-duty rotator, supports over 1000 lbs. Same indicator as above. Order 8-conductor cable below. Shpg. wt., 25¾ lbs.
17 A 8025 X.......................**129.59**

55 A 7536. Belden 8448 8-Conductor Rotator Cable. 100-ft. coil. Shpg. wt., 5 lbs.......................**8.55**

E-Z Way heavy-duty crank-up Towers with Mounting Kit



Low as **320⁰⁰**

- Galvanized steel
- Telescoping type

Towers for the Ham and his beam. Simple to install—and they tilt over for easy antenna adjustment. Require no guy wires. Include "Wonder Ground Post" attachment kit. Installs with post-hole digger, no concrete needed (except 72, 75-ft. models). Specify rotator (not incl.). Sent prepaid from Florida. Send remittance with cash orders—no C.O.D. Free literature—Stock No. 17 A 8829.

Towers with Wonder Post for Tiltover

Stock No.	Type	Ht.	*Ant.	EACH
17 A 8844 ZF	WRBS-40	41′	12.0	320.00
17 A 8830 ZF	WRBX-40	42′	33.5	503.50
17 A 8845 ZF	WRBS-50	51′	12.0	438.00
17 A 8831 ZF	WRBX-50	52′	28.8	576.50
17 A 8847 ZF	WRBX-60	60′	11.0	596.50
17 A 8832 ZF	WRBX-70	72′	12.0	871.50
17 A 8833 ZF	WRBZ-75	75′	27.7	1426.00

*Maximum square feet in 50-mph wind with no guy wires.

5-position 1-kW Coax Switch

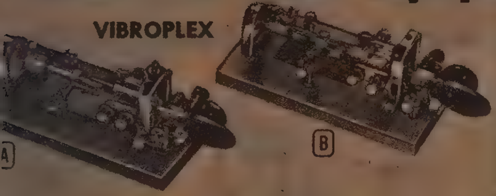
8⁹⁵

- 80-10 meters
- Five positions

One-pole, 5-position coax switch rated 1 kilowatt, 80 through 10 meters. Wt., 3 lbs.
17 A 6444.......................**8.95**

SHIPPING NOTE: Items with suffix U, W or Z in stock no. sent truck or express. See Ordering Information pages.

Values in Code Equipment and Accessories



Vibroplex Semi-Automatic Keys

A] **Deluxe "Original" Semi-Automatic Key.** Easy-working "bug" of exceptional design and quality. Performance-ested, tough and durable, it will give you years of faultless ervice. For speeds from 10 wpm on up. Used by many eteran operators. Jeweled bearings, chrome-plated mecha-ism and base. Slip-proof rubber feet prevent marring of inished surfaces. Shpg. wt., 5 lbs.
7 A 8940..32.95

B] **"Presentation" Semi-Automatic Key.** Beautifully crafted key with adjustable mainspring for wide speed range. eweled movement resists friction, prolongs life. Chromium arts, mounted on 24K gold-plated base top. Red knob, nger and thumb pieces. Rubber feet on bottom prevent lipping, preserve surface finishes. Wt., 5 lbs.
7 A 8942..43.95

arrying Case. (Not illus.) For all Vibroplex keys listed bove. Protective cloth lining. Includes lock, key and andle. Shpg. wt., 2 lbs.
7 A 8944..8.00

ord and Wedge Set. For above keys. Shpg. wt., 3 oz.
7 A 8945..2.75

ibroplex "Vibro-Keyer" Keying Mechanism. (Not illus.) Has trunnion lever for fast, effortless sending; adjustable ontact spacing and tension for individual preference. Contacts are designed for dependable long-life operation. ttractive chrome finished parts. Beige-colored base has ubber feet, stays stable. Shpg. wt., 3 lbs.
7 A 8946..20.95
7 A 8947. **Deluxe "Vibro-Keyer".** Chrome-plated base. 27.50

Kit
59^{95}
Assembled
89^{95}

Vibroplex "Vibro-Keyer" keying mechanism

Save Up to $4.95
on 717 Kit and "Vibro-Keyer"

Save Up to $5.95
on Wired 717 and "Vibro-Keyer"

Eico Model 717 Electronic Keyer

- Sharp, self-completing dots, dashes
- Monitoring oscillator • 3x5" speaker

Features four overlapping ranges from 3 to 75 wpm; sharp, self-completing dots and dashes. Monitoring oscillator, 3x5" PM speaker. Five tubes, 2 silicon rectifiers. Controls: function, off/tune/operate, 4-position speed range, speed vernier, monitor tone, volume. 5½x8x8¼". 100-130 VAC.
17 A 9492 X. Kit Form. 10 lbs..........................59.95
17 A 9120 X. Factory Assembled. 10 lbs..........................89.95
17 A 0022 L2X. 717 Kit and "Vibro-Keyer." Save $4.95. Shpg. wt., 13 lbs..........................75.95
17 A 0375 L2U. Wired 717 and "Vibro-Keyer." Save $5.95. Shpg. wt., 13 lbs..........................104.95

C
JOHNSON
D
E

Johnson Speed-X Code Keys

C] **114-320 Standard Key.** You'll get dependable service from this sturdy, quality hand key. Chrome-plated key rm suspended from hardened steel bearings. Navy-type nob. ¼" coin-silver contacts. Adjustable contact spacing nd spring tension. Black base. Shpg. wt., 2 lbs.
7 A 8920..5.95

D] **114-100-3 Deluxe Hand Key.** Precision-made key has carefully tempered spring and hardened fine-point ivots for smoothest sending. Spring tension, contact pacing and bearing pressure are adjustable. Contact iameter, .072". Satin-brass finish. Shorting switch.
7 A 8912. Shpg. wt., 2 lbs..10.50

E] **114-520 Semi-Automatic Key.** Add lasting excitement to your shack with this beautifully designed key. You'll ike its steady-as-a-heartbeat performance, sturdy con-truction, and feel of quality. Contact spacing and sliding veight easily adjust to desired speed. Has circuit-closing witch and ⅛" coin-silver contacts. Rubber feet prevent narring finished surfaces. Heavily chrome-plated hard-vare. Black die-cast base. Shpg. wt., 4 lbs.
7 A 8921..20.95

Wireless Code-practice Oscillator and Key

5^{95} *Transistorized oscillator works through AM radio*

Model 25-110. Excellent way to learn or improve your code. Makes your radio sound like a code broadcasting station. Transistorized wireless code-practice oscillator is designed for use with any 535-1605 kHz AM radio. Ideal for schools, scouting groups, hobbyists, or Amateurs. Learn code quickly and easily, and practice sending code with rugged hand code-key. You get oscillator-transmitter, code key, and 9-volt battery. Easy to operate—just connect oscillator to the screw terminals on code key, adjust your radio to oscillator frequency, and start sending code with hand-key. Size of oscillator, 1¼x3¼x2⅛". Japan. Shpg. wt., 5 lbs.
17 A 9084..5.95

Code Keys, Courses, and Practice Aids

Learn or improve your Morse Code with a Practice Oscillator

9.95 Code Oscillator Kit

A **Eico 706.** Easy to assemble and so useful when it's finished. All-transistor unit has built-in 2½" speaker, pitch control, headphone jack. Switch selects tone, flashing light, or both. Size, 6½x3¾x2¾". With battery. Shpg. wt., 2 lbs.

17 A 8627. Kit Form..............9.95
17 A 8621. Factory Assembled.....14.95

12.50 Oscillator/Monitor

B **Ameco OM Oscillator/Monitor.** Transistorized monitor with built-in speaker, tone control, headphone jack for private listening. Monitors RF output without connection to transmitter. With detailed instructions. Requires 2 "A" Batteries. Size, 6¼x3¾x2½". Shpg. wt., 2 lbs.

17 A 9077. Factory Assembled.....12.50

9.95 Three-way Oscillator

C **Midland 25-109.** Fully assembled, battery-powered code practice oscillator. Has variable pitch control. Three-way selector switch for tone, light or combination tone/light operation. Includes standard phone jack monitor. Screw terminals. Size, 6⅛x3½x2⅝". Less batteries.

17 A 6888. Shpg. wt., 4 lbs.......9.95

9.95 *Ready for easy code practice*

E 14.95

Beginner's Morse Code Practice Outfit

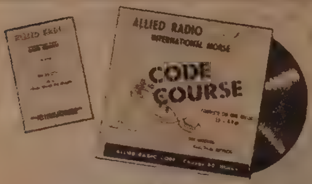
D **Hallicrafters HA-18A.** Completely factory-assembled and ready for use. Specially designed for anyone desiring to learn Morse code. Outfit includes a portable solid-state battery-operated code oscillator, two penlight batteries, code practice key, and connecting wire. Features variable pitch control, built-in speaker, standard ¼" headphone jack. Compact polystyrene case.

17 A 9080. Shpg. wt., 1 lb..........9.95

Code Practice Oscillator with 4" speaker

E **Ameco CPS-WT Oscillator.** Completely factory-assembled code practice oscillator is perfect for the learning beginner, or the professional who wants to keep in practice. Features built-in 4" speaker, volume and tone controls for good sound. Can also be used as a keying monitor. Rugged construction, compact design. Overall size, 6½x5x3½". For 110-120 V, AC or DC.

17 A 8722. Shpg. wt., 4 lbs..........14.95



Allied Code Course

4.49 *A sure-fire way to learn or improve your code*

Ten easy code lessons on one 12", 33⅓ rpm LP record—calculated to advance you quickly to a speed of 15 words per minute. Table of International Morse Code is included on back of jacket. With instruction booklet containing lessons identical to those on record.

17 A 8573. Shpg. wt., 1 lb........4.49

Rider Code Courses

"Sight 'N' Sound" courses on 10" 33⅓ rpm LP records.

17 A 8558. Novice Course. (0-8 wpm.) Three 10-inch LP's, 47 cards, and book. Shpg. wt., 2 lbs..........9.50

17 A 8564. Advanced Course. (9-20 wpm.) Three 10-inch LP records and book. Shpg. wt., 2 lbs.....8.95

17 A 8565. Complete Course. (0-20 wpm.) Six 10-inch LP's, 47 cards, and book. Shpg. wt., 6 lbs ...15.95

Quality Code Practice Aids

3.75 *Low-cost hand key is fully adjustable*

F **Johnson 114-310 Standard Key.** Excellent for the beginner or the experienced operator. Designed for clear, easy sending. Made for hard usage, will last for years. Tension adjustment sets touch to a wide variety of tastes. Smooth adjustable bearings and "cushion contact" design provide smooth keying action. Mechanical parts are nickel-plated; ⅛" silver contacts. Heavy die-cast base. Accepts semi-automatic key.

17 A 8903. Shpg. wt., 2 lbs.......3.75

G **Johnson 114-400 Buzzer.** Practice code under ideal conditions. Learn to send properly made characters and to read code expertly. Constant-frequency buzzer with screw adjustment to vary high-frequency tone to your particular preference. Requires two 1½-V batteries (elsewhere in this Catalog). Shpg. wt., 5 oz.

17 A 8911....................2.00

H J Key with Buzzer

2.99 *Save 16%*

Purchased Separately, $3.50. Lear to send clear and understandabl code and to receive it easily. Practic will make your code perfect with thi low-cost key and buzzer outfit. Ideally suited for novice code study. An our outfit price saves you 51 Quality constructed, durably mad key has handsome polished solid brass base, heavy silver contacts nickel-plated hardware, shorting ba to take key out of the circuit, an black knob. Fully adjustable tension and spacing allows you to adjust touch. Requires two 1½-V batteries. Japan. Shpg. wt., 2½ lbs.

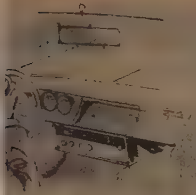
17 A 9025..................**Both for 2.9**

H **17 A 6656. Key Alone.** 1 lb....2.5

J **17 A 9018. Buzzer Alone.** Well constructed buzzer has screw adjustment to vary tone. Molded base an cap. Requires two 1½-V batteries Japan. Shpg. wt., 6 oz...........1.0

pages of values in Allied® CB 2-way Radios

ny U.S. citizen, 18 years of age or older, can use the Citizens Band . . . license application enclosed with each unit—no test required

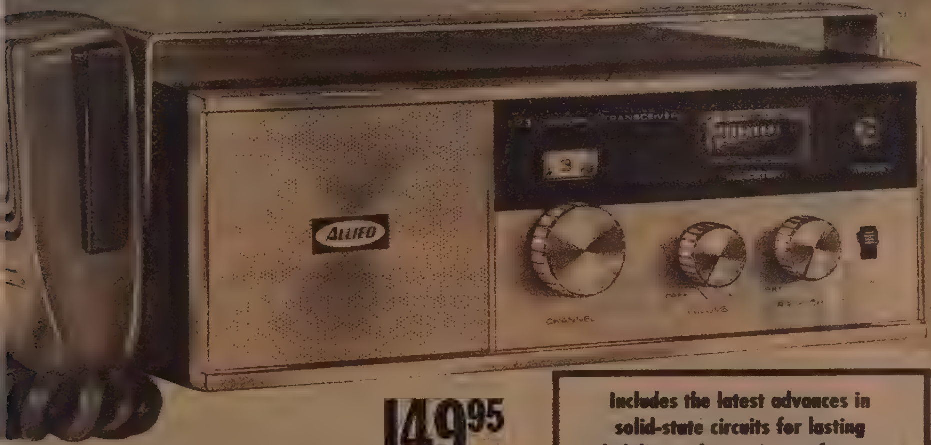


You can have two-way radio communications, for business or personal use, from your home to your car or boat, from your office to vehicles on the road, between vehicles, or between your office and warehouse. CB is useful anywhere . . . It's the fast, easy and convenient way to keep in touch.

Choose from Allied's own extra-value line, plus other most-wanted brands.

Use Allied's Credit Fund Plan to outfit your CB station. See page 438 for details.

Allied solid-state 23-channel mobile 2-way Radio



149⁹⁵

$8 monthly

see page 438

Our best mobile model . . has every big feature necessary for finest two-way communications from car or boat

del A-2564. Only Allied could bring you this full-feature bile two-way Citizens Band radio at such a low price! Two egrated circuits, one in squelch circuit and one in audio cir- t, assure exceptional performance from an ultracompact unit at easily installs in car or boat. Operates on 12 VDC. In- porates 23-channel frequency synthesizer—no additional crys- s to buy. Utilizes FET in RF amplifier stage for low noise and sensitivity. Dual conversion and ceramic filters for maximum ectivity and image rejection. Audio output circuit provides ximum power output with minimum distortion.

ise blanker reduces ignition and similar impulse noises with gligible loss of desired signal intelligibility. Self-adjusting tomatic noise limiter switches in whenever noise blanker itches out. Combination S/RF power output meter. Has built- 3" speaker. Adjustable squelch. Built-in full-time speech com- ession. Built-in 3-watt PA system requires only external speak- Has jacks for external and PA speakers. Size, only 8¼x3¼x8". ith push-to-talk ceramic mike and mounting bracket for nplified installation in car or boat. For 12 VDC neg. ground.

A 6966 U. Shpg. wt., 4 lbs. 149.95

SPECIFICATIONS

ceiver Circuit. *Sensitivity:* Less than 0.75 μV for 10 dB S+N/N tio. *Selectivity:* 6 kHz at −6 dB. *Adjacent Channel:* Better an 50 dB rejection. *Image Rejection:* Better than 50 dB. *IF jection:* First IF, 80 dB; second IF, 100 dB. *Squelch:* 1-150 μV justable. *Audio Output:* 3 watts. **Transmitter Circuit.** *RF Output wer:* 3.5 watts. *Modulation Capability:* 100%. **General.** *Antenna pedance:* 50 ohms. *Semiconductors:* 19 diodes, 24 transistors, 2 egrated circuits, 1 Field-Effect Transistor.

Includes the latest advances in solid-state circuits for lasting reliability and superior performance

Two integrated circuits for small size and better reception

Field-Effect Transistor for low noise and maximum sensitivity

100 MHZ
455 KHZ

Ceramic filters, dual conversion for top image rejection and selectivity

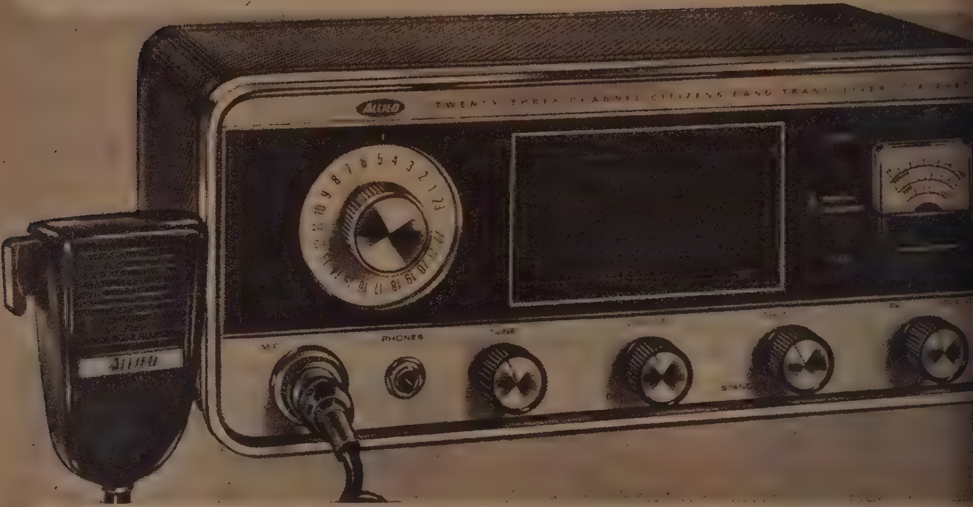
Built-in 3-watt PA system—requires only external speaker

Incorporates both automatic noise limiter and noise blanker circuit

No crystals to buy—uses a highly stable frequency synthesizer

See page 186 for complete Allied A-2564 CB Outfits

Allied 23-channel base/mobile Citizens Band Two-wa
Radio with range-expander for extra "talk power"



179⁹⁵ $9 monthly
see page 438

Built-in meter and SWR bridge circuit let you measure SWR for optimum antenna tuning . . illuminated-scale meter reads SWR, forward/reverse reflected power, "S" units

Frequency-synthesis circuit gives you crystal-controlled transmit and receive . . no extra crystals to buy

Specially designed three-scale SWR/Power/"S" units illuminated meter

Set-calibrate meter control

Meter-function selector switch

Range-expander boosts modulation for more "talk power"

Handy front panel switch lets you select either CB or PA mode

Model A-2567. This two-way radio features built-in solid-sta power supply for both 115 VAC base and 12 VDC mobile oper tion. A masterpiece in design and operation, with performance th beats many models priced much higher. Frequency-synthe circuit gives you crystal-controlled transmit and receive on all channels . . no extra crystals to buy. Just turn the selector to a desired channel, and the illuminated numerals show the chan in use.

Full-power 5-watt transmitter offers 100% modulation. Rang Expander boosts "talk power" to increase transmitter rang Pi-network output matches any CB antenna. Specially design SWR bridge circuit lets you measure SWR for optimum anten tuning. Illuminated three-scale meter reads SWR, forward/rever reflected power output, and serves as "S" meter. Dual-conversi superhet receiver has excellent selectivity and gain, with de tuning circuit to pull in signals from stations operating up to kHz off-frequency.

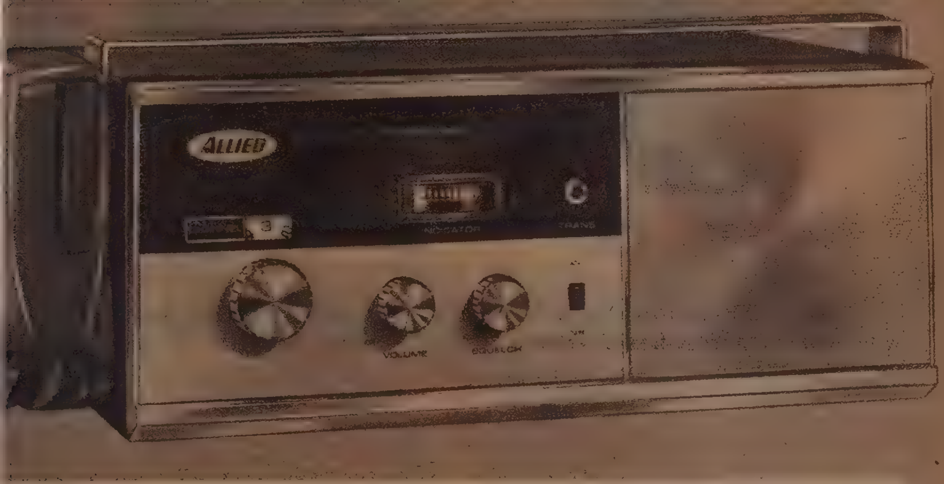
Serves as 2.5-watt PA amplifier, with an external speaker. Mod lation indicator doubles as monitor to prevent missed calls duri PA use. Adjustable squelch; standby switch; built-in 4″ speak headphone jack; noise limiter. 7½x13⅜x5½″. With all crysta AC and DC power cords, noise-canceling push-to-talk mike wi coiled cord, universal mounting clips.
17 A 6435 U. Shpg. wt., 19 lbs. . . . . **179.**

SPECIFICATIONS

Receiver Circuit. *Sensitivity:* 0.5 μV or better for 10 dB S/N rat *Selectivity:* ±3 kHz at –6 dB. *Audio Output:* 2.5 watts. *IF:* T stages, dual conversion. **Transmitter Circuit.** *Power Input:* 5 wat *Modulation:* 100% capability; range-expander circuit. *Outp* Pi-network; matches any antenna type. **General.** *Controls:* Cha nel Selector Switch with illuminated channel indicator; Del Tune; On/Off Volume; Squelch; PA/Receive Switch; Ran Expander Switch; Meter Function Switch; Set-Calibrate. *Act Circuit Elements:* 10 tubes, 13 diodes, 2 transistors. *Overall Si* 7½x13⅜x5½″. *Power Requirements:* 115 volts AC, 50-60 Hz 12-volt DC, negative ground.

See page 187 for complete Allied A-2567 CB 2-way Radio Outfit

Step up to the finest . . Allied's best 23-channel base/mobile solid-state Citizens Band Two-way Radio



erates on either 12 VDC for mobile or 117 VAC base from ilt-in power supplies electronically regulated to provide ximum stability over a wide variation in input voltages

199⁹⁵ $10 monthly
see page 438

l A-2568. Outstanding in every way! Operates on 117 VAC built-in power supply electronically regulated to provide mum stability over a wide variation of input voltages—an choice for base station operation. It also includes facilities for tion on 12 VDC in cases of emergency or for mobile or boat AC and DC supplies are separately fused for added circuit ction. Incorporates 23-channel frequency synthesizer—no crystals to buy.

integrated circuits, one in squelch circuit and one in audio it, assure the exceptional performance you would expect to only in expensive models. Has FET in RF amplifier stage for oise and high sensitivity. Dual conversion and ceramic filters e maximum selectivity and image rejection. Audio output it provides maximum power output with minimum distor- Has 100% modulation capability. Solid-state transmit/ ve switching and transmit indicator light are activated by -to-talk switch on mike.

e blanker reduces ignition and similar impulse noises with gible loss of desired signal intelligibility. ANL switches in noise blanker switches out. Has built-in 4" speaker. Com- ion S/RF power output meter. Built-in 3-watt PA system res only ext. speaker. Takes 50-ohm antenna. Jacks for nal and PA speakers. 4¾x11¼x4". Mike, mounting bracket. **6965 U.** Shpg. wt., 8 lbs. **199.95**

SPECIFICATIONS

ver Circuit. *Sensitivity:* Less than 0.75 μV for 10 dB S+N/N *Selectivity:* 6 kHz at −6 dB. *Adjacent Channel:* Better than 3 rejection. *Image Rejection:* Better than 50 dB. *IF Rejection:* IF, 80 dB; second IF, 100 dB. *Squelch:* 1-150 μV adjustable. *o Output:* 3 watts. **Transmitter Circuit.** *RF Output Power:* 3.5 s. *Modulation Capability:* 100%. **General.** *Power Consumption:* ive, 13.8 VDC nominal, 117 VAC nominal; 120 mA stand-by nt. Transmit, 13.8 VDC nominal, 117 VAC nominal; 1.4 s at 100% modulation. *Antenna Impedance:* 50 ohms. *Overall* 4¾x11¼x4". *Semiconductors:* 23 diodes, 24 transistors, 2 in- ted circuits, one FET.

Includes the latest advances in solid-state circuits, and reflects the best features of 2-way radio design

2 integrated circuits for small size and exceptional performance

Field-effect transistor for low noise and maximum sensitivity

100 MHZ
455 KHZ

Ceramic filters and dual conversion for sharp selectivity

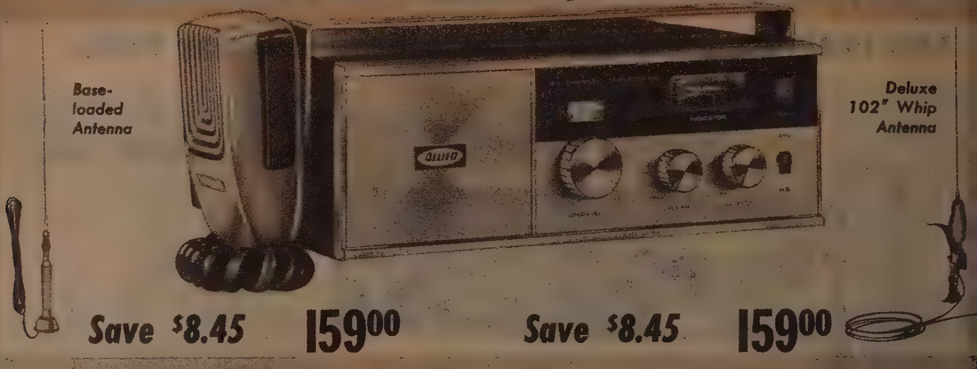
Built-in 3-watt PA system—requires only external speaker

Automatic noise limiter and noise blanker for high intelligibility

No crystals to buy—uses a highly stable frequency synthesizer

See page 188 for complete Allied A-2568 CB Outfits

23-channel CB Two-way Radio-and-Antenn



Allied A-2564 Two-way Radio with trunk mount base-loaded Antenna

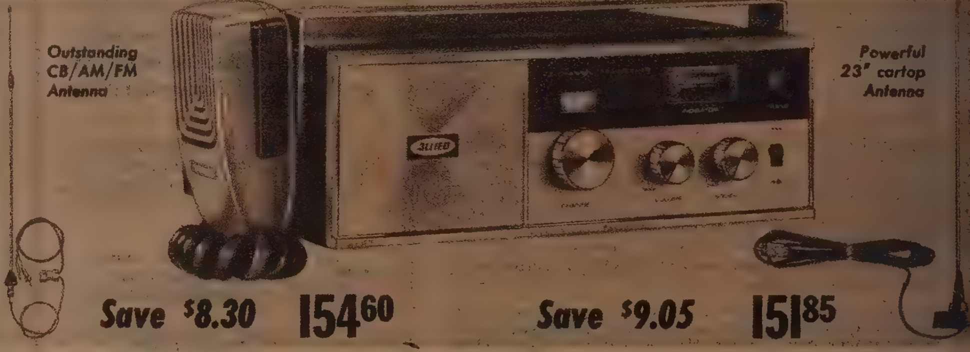
Radio has speech compression for high intelligibility . . antenna whip and shock-spring are stainless steel

Separately, $167.45. Deluxe mobile CB station outfit includes Allied A-2564 23-channel Two-way Radio and Allied A-2581 base-loaded Antenna. Radio has ANL, PA facility, built-in speaker. Antenna has no-hole "Quick-Grip" trunk mount; heavy-duty stainless-steel shock-spring; tapered stainless-steel whip with fine-tuning adjustment for perfect match to 50-ohm output, and solderless 16-ft. coaxial cable and PL-259 connector. Trunk mount installs without leaving marks. Antenna has omni-directional pattern for uniform signal strength.
17 A 0432 L2U. Shpg. wt., 5¾ lbs. 159.00

Allied A-2564 Two-way Radio with full-length 102" whip Antenna

Fine mobile radio features dual conversion for high selectivity . . antenna includes stainless steel spring

Separately, $167.45. Mobile CB station outfit inclu
Allied A-2564 23-channel Two-way Radio and Allied
2582 deluxe 102"-whip Antenna. Radio has everything
would want for top mobile performance, including cera
filters, FET RF stage, and integrated circuits in audio
squelch circuits. Antenna has no-hole bumper mo
gutter clip, heavy-duty stainless steel spring, solder
20-ft. coaxial cable and PL-259 connector. No-hole bum
mount makes installation easy and does not mar car fin
Spring prevents damage to antenna.
17 A 0431 L2U. Shpg. wt., 9 lbs. 15



Allied A-2564 Two-way Radio with combination CB/AM/FM Antenna

Feature-packed radio has sensitive, stable FET front-end . . antenna has loading coil, telescopes 50 to 28 inches

Separately, $162.90. Mobile CB station outfit includes Allied A-2564 23-channel Two-way Radio and Allied A-2583 CB/AM/FM Antenna. Superb radio has dual conversion and ceramic filters for high selectivity and image rejection. Antenna has chrome-plated brass whip, high-performance loading coil, lifetime stainless steel adjustable tuning rod, isolating coupler. With 22-ft. coax and PL-259 plug. Extends to 50 inches, telescopes to 28 inches for low garaging. Single-hole mounting. Isolating coupler is adjustable for best AM/FM reception.
17 A 0430 L2U. Shpg. wt., 7 lbs. 154.60

Allied A-2564 Two-way Radio with loaded 23" car-top Antenna

Great combination for a hot signal—full-feature rad and high-efficiency, short length car-top antenna

Separately, $160.90. Power-packed mobile CB stat
outfit includes Allied A-2564 23-channel Two-way R
and Allied A-2598 23" car-top Antenna. Radio featu
dual conversion, speech compression, PA facility. Ante
has special etched-copper loading coil, claw mount, 22
coaxial cable and PL-259 connector. Loading coil g
high efficiency in spite of antenna's short length.
get a short antenna with big performance—lets you
under any cover. Claw mount fits into any ⅜-¾"
with a positive grip. Rugged construction for long
17 A 0429 L2U. Shpg. wt., 6 lbs. 15

See page 183 for full description of Allied A-2564 two-way rad

tfits with Allied A-2564 and A-2567

ersatile
B/AM/FM
ntenna
Deluxe
102" whip
Antenna

Save $10.15 **182^75**

Save $10.70 **186^75**

high-performance A-2567 Two-way Radio all-purpose mobile CB/AM/FM Antenna

erformance radio has Range Expander for stronger gnals . . antenna telescopes from 50-28 inches

tely, $192.90. Mobile CB station outfit includes A-2567 23-channel 2-way Radio and Allied A-2583 M/FM Mobile Antenna. Radio has frequency sis for all 23 channels, and 115 VAC/12 VDC power . Antenna has chrome plated brass whip, high-nance loading coil, lifetime stainless steel adjustable rod, isolating coupler. Extends to 50 inches, tele-down to 28 inches for low garages. Isolating coupler fine performance on CB and is adjustable for best M reception. With 22-ft. coax, PL-259 plug.

137 L2U. Shpg. wt., 21¾ lbs. 182.75

Feature-packed Allied A-2567 two-way Radio with 102"-whip mobile Antenna

Superb radio has Range Expander and dual conversion . . top-quality whip with stainless steel spring

Separately, $197.45. Top-quality mobile CB station outfit includes Allied A-2567 23-channel Two-way Radio and Allied A-2582 deluxe 102"-whip mobile Antenna. Radio has advanced circuit, squelch circuit, dual conversion, 115 VAC/12 VDC power supply. Antenna has no-hole bumper mount, gutter clip, heavy-duty stainless steel spring, solderless 20-ft. coaxial cable and PL-259 connector. The no-hole bumper mount installs without special tools and does not mar car finish. Stainless-steel shock-spring prevents damage to antenna.

17 A 0436 L2U. Shpg. wt., 23¾ lbs. 186.75

Colinear
Antenna
and Cable
Coaxial
Cable
Allied
Beam
Antenna
Coaxial cable

Save $10.45 **199^95**

Save $10.45 **214^95**

llied A-2567 Two-way Radio with 19-ft. omnidirectional colinear base Antenna

of our best 23-channel radios . . has SWR meter, al power supply . . with complete antenna outfit

tely, $210.40. Base station outfit includes Allied 23-channel Two-way Radio and Allied A-2572 r Antenna. Radio has range expander to provide ntelligibility at greater distances, SWR meter, 115 12 VDC power supply. Antenna has 19′ 10″ alumi-adiator, solid-state matching coupler for maximum transfer, clover-leaf top hat, center skirt. With 50 RG-58/U foam-dielectric coaxial cable. ⅝-wave-provides superior performance. VSWR 1.04:1 or C grounded for lighting protection.

434 L3U. Shpg. wt., 28¼ lbs. 199.95

Allied A-2567 two-way radio with base station 24-ft. five-element beam Antenna

Radio provides maximum signal and intelligibility . . directional antenna aims signal where you need it

Separately, $225.40. Base station outfit includes Allied A-2567 23-channel Two-way Radio and Allied A-2599 base-station 5-element Beam Antenna. Radio has dual conversion, PA facility, SWR meter, 115 VAC/12 VDC power supply. Antenna has 24-ft. boom and 18′ 8¾″ elements. With 50 ft. of RG-58/U foam-dielectric coaxial cable. The big 24-ft. boom allows proper spacing of elements for maximum gain. Forward gain of 12.3 dB and front-to-back ratio of 24 dB. Highly directional pattern puts your signal where you want it. For 1½″ mast.

17 A 0433 L3Z. Shpg. wt., 44¾ lbs. 214.95

age 184 for full description of Allied A-2567 two-way radio

Our best 23-channel CB Radio-Antenna Outfi

Base-loaded Antenna
Deluxe 102" whip Antenna
Save $12.95
204⁵⁰
Save $12.95
204⁵⁰

Allied A-2568 solid-state Two-way Radio with base-loaded mobile whip Antenna

Superb CB radio has dual conversion, ceramic filters, FET RF stage, and more . . with stainless steel antenna

Separately, $217.45. Mobile station includes Allied A-2568 23-channel Two-way Radio and Allied A-2581 base-loaded Antenna. Radio has frequency synthesis for all 23 channels, 115 VAC/12 VDC power supply. Antenna has stainless-steel shock spring, no-hole "quick-grip" trunk mount, tapered stainless-steel whip with fine-tuning adjustment for perfect match to 50-ohm output, and solderless 16-ft. coaxial cable with PL-259 connector. Omnidirectional radiation pattern. Trunk mount makes installation easy and can be removed without leaving scratches.
17 A 0427 L2U. Shpg. wt., 9¾ lbs. 204.50

Allied A-2568 solid-state Two-way Radi with full-length 102" mobile whip anten

Integrated circuits in audio and squelch circuits . . antenna has strong stainless-steel spring

Separately, $217.45. Low price for top-quality outfit Allied A-2568 23-channel Two-way Radio and Allie 2582 deluxe 102"-Whip Antenna. Radio has cer filters, solid-state transmit/receive switching, 115 VA VDC power supply. Antenna has no-hole bumper mo gutter clip, heavy-duty stainless-steel spring, and so less 20-ft. coaxial cable with PL-259 connector. This full-size antenna system of the type used by law-en ment agencies. The bumper mount is easy to install wit special tools. Spring prevents antenna damage.
17 A 0428 L2U. Shpg. wt., 13 lbs. 2

Colinear Antenna and Cable
Save $20.45
209⁹⁵
Save $25.45
219⁹⁵
Five-elem Beam Antenna

Allied A-2568 solid-state Two-way Radio with 19-ft. colinear base-station Antenna

Radio has every feature for top performance including solid-state switching . . antenna delivers long range

Separately, $230.40. Base station outfit includes Allied A-2568 23-channel Two-way Radio and Allied A-2572 base-station colinear Antenna. Radio has FET RF stage, integrated circuits, 115 VAC/12 VDC power supply. Antenna has 19′ 10″ aluminum radiator, solid-state matching coupler, clover leaf top-hat, center skirt, 50 feet of RG-58/U foam-dielectric coaxial cable. Omnidirectional pattern with ⅝-wavelength radiator for superior performance. Solid-state matching coupler for best signal transfer. VSWR of 1.04:1 or less. DC grounded.
17 A 0426 L3U. Shpg. wt., 17½ lbs. 209.95

Allied A-2568 solid-state Two-way Radi with base-station 5-element beam Antenn

Dual conversion radio has base/mobile power su . . directive antenna beams signal where you wan

Separately, $245.40. Highly efficient CB base station includes Allied A-2568 23-channel Two-way Radio Allied A-2599 base-station 5-element Beam Ante Radio has FET RF stage and integrated circuits in and squelch circuits. Antenna has 24-ft. boom and 8¾-inch elements; With 50-ft. of RG-58/U foam-diele coaxial cable. Radiates a near-perfect directional pat Forward gain of 12.3 dB and an excellent front-to- ratio of 24 dB. Directivity reduces interference from stations. For 1½" mast.
17 A 0425 L3Z. Shpg. wt., 34 lbs. 2

See page 185 for full description of Allied A-2568 two-way r

ıes in 5-watt mobile CB 2-Way Radios

MIDLAND

nels . . . high sensitivity

0 *Sensitive combination speaker/microphone*

855. High-performance solid-
uit with excellent receiving
v of 0.5 μV for 10-dB S/N.
those hard-to-receive sig-
power transmitter gives max-
ge and clarity. Very compact
installation in virtually any
oat. Combination speaker/
ne. Transmit indicator light.
l cabinet, 4¾x6½x2". Chan-
stals. 12 VDC. Japan.
X. Shpg. wt., 3 lbs....74.50

JOHNSON

5 channels . . ultracompact

99^{95} *With microphone and coiled cord*

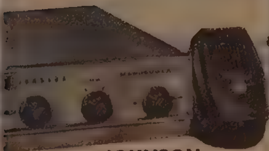
Messenger 125. Has every feature necessary for fine communications. Solid-state circuit with 0.5-μV sensitivity for 10-dB S/N. Selectivity, 6 kHz at 6-dB down. High-level modulation and speech compression for increased talk-power and range. ANL for quiet operation. Pushbutton channel selector and on-off switch. Illuminated channel numbers. Only 1 9/16x4 9/16x7". Channel 9 crystals. 12 VDC.
17 A 6504 X. Shpg. wt., 6 lbs....**99.95**

REGENCY

12 channels . . special styling

99^{95} *Front panel has only 3 controls*

Model 500. Designed with racing stripes in American red-white-and-blue. Full-power transmitter. Superhet receiver has better than 1-μV sensitivity for 10-dB S/N. Adjustable squelch silences speaker during standby operation. Selectivity is 10 kHz at 3-dB. Modern, solid-state circuit. PA and external-speaker facilities. 2¼x5½x7½". With push-to-talk ceramic mike, Channel 11 crystals. 12 VDC.
17 A 6592 X. Shpg. wt., 6 lbs....**99.95**



JOHNSON

els . . speech compressor

95 *Adjustable squelch for quiet operation*

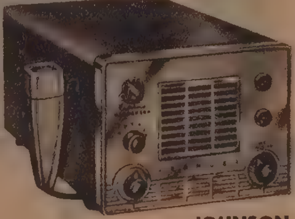
110. Famous Johnson de-
ty at low cost. Sensitive,
receiver has built-in auto-
oise limiter and adjustable
or quiet operation. Full-power
er with speech compressor
greater talk power and ex-
ansmitting range. Solid-state.
8¾". Complete with push-
nike and Channel 9 crystals.
DC negative ground.
X. Shpg. wt., 6 lbs...109.95

FANON

12 channels . . base/mobile

109^{95} *Two selective ceramic filters*

Fanon SFT-600. Modern solid-state circuit and full power assure dependable communications. Dual-conversion with 1-μV sensitivity for 10-dB S/N. Ceramic IF filters give 3-kHz bandwidth at 6-dB down; adjacent-channel rejection, 45 dB. ANL and squelch. AC/DC selector; battery-polarity reversing plug. Signal-strength meter. 9½x5x2⅞". Mounting bracket, Channel 9 crystals. 117 VAC/12 VDC.
17 A 6998 X. Japan. 6 lbs......**109.95**



JOHNSON

5 channels . . base/mobile

124^{95} *Two function-indicator lights*

Messenger I. Provides a clear, penetrating signal with excellent readability. Built-in base/mobile supply. Full-power transmitter with 100% modulation. Easy switch-selection of up to five channels. Squelch, ANL. Two function indicator lights. 10-tube circuit. Chrome-trimmed case, 5⅝x7x11⅜". AC, DC cords; mike; Channel 9 crystals. 115 VAC/12 VDC.
17 A 9414 U. Shpg. wt., 17 lbs..**124.95**
17 A 9416. Mobile Mount. 1¼ lbs...**2.50**

channels . . . solid-state circuit with dual conversion and 100% modulation

r III. Offers everything needed for outstanding
cations. Provides excellent readability—cuts
interference to get your messages through.
olid-state circuit with up to 12 crystal-con-
ransmit and receive channels. Full-power
odulated transmitter for maximum-range com-
ons. Sensitive dual-conversion superhet re-
s adjustable squelch for silent standby opera-
x6 3/16x8¾". Mike, mounting bracket, Channel
. 12 VDC, negative ground.
U. Shpg. wt., 8 lbs.....................149.95

JOHNSON

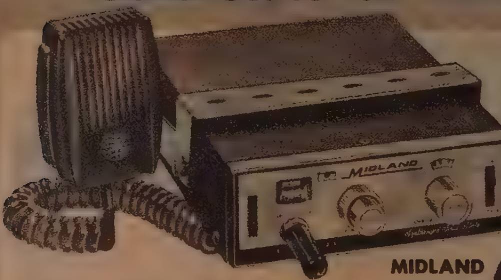
Cut $10.00

149^{95}

Was $159.95 in Last Year's Catalog

NG NOTE: Items with suffix U, W or Z in stock no. sent truck or express. See Ordering Information pages.

Solid-state CB mobile 2-Way Radios wit



Mechanical filter for super-selectivity

139^{95} *Dual-conversion for top sensitivity, extra selectivity*

Model 13-870C. Offers 2-way radio performance you'd never expect at this low price. Frequency-synthesized crystal-controlled transmit/receive. Dual-conversion receiver with mechanical filter for super-selectivity. Sensitivity better than 1 μV for 10-dB S/N. RF/SWR meter. Illuminated channel selector; built-in speaker; PA facility; push on-off switch. Metal case, 2⅛x6x8½". Solid-state circuit. Mounting bracket, power cord, mike, all crystals. 12 VDC. Japan.
17 A 9721 U. Shpg. wt., 4½ lbs. 139.95

Compact easy to install model

159^{00} *Panel light shows S6 or stronger signals*

Courier "Traveller." A compact model designed for easy installation in car or boat. You'll like its versatility, solid-state design, and quality. Offers full-power 5-watt-input transmitter. Frequency synthesized 23-channel crystal-controlled transmit/receive—all crystals supplied. Has panel light to show S6 or better signal; transmit and modulation indicator; external speaker jack. Only 1⅞x5¾x6¼". Mounting bracket, mike, cables, all crystals. 12 VDC.
17 A 6528 U. Shpg. wt., 6 lbs. 159.00

Solid-state integrated-circuit model

149^{95} *Digital readout SWR/RF meter for more accurate readings*

Model 13-872. Presents a handsome, modern appearance, and performs as well as it looks. Frequency-synthesized crystal-controlled transmit/receive. Solid-state design with integrated circuit. Dual-conversion superhet receiver with excellent sensitivity of 0.5 μV for 10-dB S/N. Delta tuning for off-frequency stations. Transmit and modulation indicators. Vinyl-trimmed wood-grain cabinet, 3x10x12". With mike, all crystals. 12 VDC. Japan.
17 A 6992 U. Shpg. wt., 8 lbs. 149.95

Speech compressor for greater talk power

179^{95} *Speech Compressor circuit boosts effective transmitting range*

Messenger 123. Full-power transmitter with speech compressor gives maximum-range communications. Excellent 0.5-μV sensitivity (for 10-dB S+N/N) and noise limiter let you bring in weak stations with greater readability. Squelch eliminates noise during standby operation. Temperature compensated from −20° to +140°F. Illuminated S/Relative Output meter. 3-watt audio output for good, solid reproduction. With mike, all crystals. 2½x6$\frac{3}{16}$x8¾". 12 VDC.
17 A 6454 U. Shpg. wt., 5 lbs. 179.95

Deluxe model by Regency with Collins mechanical filter

Specially styled for mobile use

189^{00}

$10 monthly

See page 438

Model GT-523. Racing stripes in Ameri red-white-and-blue highlight the handso design of this 2-way radio. Modern sol state circuit, full-power transmitter, a superhet receiver with better than 1-μV sen tivity (for 10-dB S+N/N) for maximu range communications. Adjustable squelch quiet standby operation. Excellent 8-k bandwidth at 6-dB down for good adjacen channel rejection. Full 2-watt audio outp PA facility and provision for external speak 2¼x5½x7½". With push-to-talk cera mike, all crystals. 12 VDC.
17 A 6593 U. Shpg. wt., 6 lbs. 189

SHIPPING NOTE: Items with suffix U, W or Z in stock no. sent by or express. See Ordering Information pa

att power and crystals for all 23 channels

JOHNSON

ech Compressor gives greater talk power

199^{95} *Highly sensitive dual-conversion receiver*

enger 320. Excellent 0.5-μV sensitivity (for 10-dB), full transmitting power, and speech compressor e top-notch performance. Squelch for quiet stand-peration; S/RF-Output meter. Modern solid-state it. Built-in 3-watt PA system—needs only ex-l speaker. 2½x8x9". Mounting bracket, ceramic , all crystals. FCC type accepted, DOT approved. DC, negative ground.

6271 U. Shpg. wt., 8 lbs. 199.95
6471 X. 117-VAC Power Supply. Wt., 5 lbs. . . . 32.95

PACE

Deluxe model with all silicon transistors

199^{95} *Full 100% modulation capability for punching out a strong signal*

Model 2300. Features *silicon* transistor solid-state design for high stability and best performance. Sensitive dual-conversion superhet receiver. Top-power transmitter with 100% modulation capability for maximum range. S-meter; PA and loud-hailer facilities. Diode protection system. Illuminated channel selector; squelch and volume controls. Walnut-grain metal case, 2½x6¾x8½". Complete with ceramic mike, all crystals. For 12 VDC, negative ground.

17 A 9716 U. Shpg. wt., 4½ lbs. 199.95

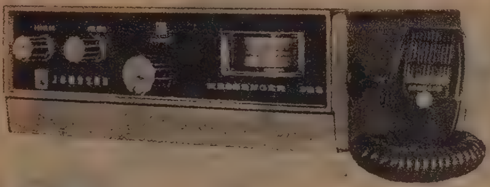
KAAR

Hi-Q circuits for top-notch selectivity

229^{95} *Illuminated signal-level and dynamic-modulation meter*

awk II TR-337. Features selective superhet re-r with excellent sensitivity of 0.4-μV for 10-dB , AGC, ANL, adjustable squelch. Illuminated l-level/dynamic-modulation meter. PA facility; nal-speaker jack; enclosed plug-in transmit/re- relay. Zener-diode stabilized. Wood-grain front l. 2⅝x6½x9¼". Ceramic mike, mounting bracket. ystals. 12 VDC, negative ground.

6462 U. Shpg. wt., 11 lbs. 229.95
6464 X. Model P336 117 VAC Supply. 5 lbs. . . 34.95



JOHNSON

Crystal filter for razor-sharp selectivity

239^{95} *Highly stable temperature-compensated circuit*

Messenger 323. Fingertip selection of 23 crystal-controlled channels. Crystal filter that virtually eliminates adjacent-channel interference. Adjustable squelch; ANL. Speech compressor for greater talk power. Temperature compensation. Illuminated S/Power-Output meter. PA facility. 2½x8x9½". Ceramic mike, all crystals. 12 VDC, positive or negative ground. FCC Type Accepted, DOT Approved.

17 A 6890 U. Shpg. wt., 8 lbs. 239.95
17 A 6471 X. 117-VAC Power Supply. Wt., 5 lbs. . . . 32.95

ar professional model with dual-conversion receiver and triple amplified AGC

-23. Designed for top performance. vet transmitter with final output r-collector rated 7 watts dissipa-gh-level Class B modulation. Dual-on superhet receiver with excellent ensitivity for 10-dB S+N/N; voltage on; series-gate limiter for positive noise tion; triple-amplified AGC; noise-adjustable squelch. Big 2x6" speaker; PA facility, needs only external Mounting bracket, power cable, mike, als. Size 2⅝x6¾x8⅜". For 12 VDC, ground.

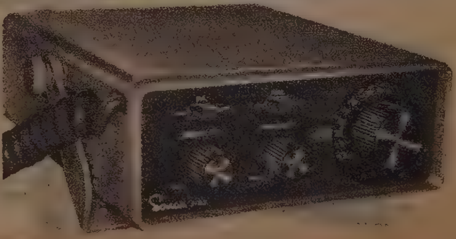
5 U. Shpg. wt., 4½ lbs. 239.95

Built for use where others may fail

239^{95}

$12 monthly

See page 438



Citizens Band 5-watt 23-channel 2-Way Radio

MIDLAND

Full-feature base model at a low price

139^{95} *Even at this low price you get crystals for all 23 channels*

Model 13-890. Priced surprisingly low for a 2-way radio ready to use on all CB channels. Receiver features delta tuning to bring in stations that may be operating off-frequency, plus noise limiter to cut interference. Squelch control. Transmit indicator light. Standby switch. Full 5-watt DC input. Sensitivity is 0.75 µV for 10 dB signal-to-noise ratio. Deluxe tube-type circuit. With mike, all crystals. Vinyl-clad steel case. 7½x16x13″. For 115 VAC. Japan.
17 A 8701 U. Shpg. wt., 18½ lbs. **139.95**

MIDLAND

Silicon-transistor base unit with IC's

179^{95} *Dual-conversion plus IC's for superior overall performance*

Model 13-876. All silicon transistors for extra-dependable 2-way communications. Integrated circuits, and mechanical filter for sharp selectivity in receiver. Sensitivity is better than 1 µV for 10 dB signal-to-noise ratio. Squelch control, RF-Standing Wave meter. Delta tuning brings in even off-frequency stations. Features PA switch with volume control. 8¾x14½x13″. Woodgrain vinyl-clad steel case. With mike, all crystals. For 117 VAC. Japan.
17 A 8702 U. Shpg. wt., 13½ lbs. **179.95**

COURIER

Deluxe base mobile unit for 117 VAC/12 VDC

199^{00} *Built-in Range Expander circuit boosts transmitting range*

Courier 23. This popular CB 2-way radio puts out a strong, clear signal. Features single-knob bandspread tuning; switches for standby, PA and CB; automatic noise limiter; S/RF meter; modulation indicator; AVC; squelch. Jack for headphone or external speaker. Pi-network output for 30-100 ohm antennas. Sensitivity, 0.25 µV for 6 dB signal-to-noise ratio. Deluxe tube circuit. For 117 VAC and 12 VDC. 5x12½x7¾″. With mike, all crystals, mobile mtg. bracket.
17 A 6526 U. Shpg. wt., 16 lbs. **199.00**

MIDLAND

Base model with IC's and digital clock

214^{95} *Field-effect-transistor front end and 4 IC's for finest performance*

Model 13-877. Has latest circuits for premium-quality performance, *plus* a built-in digital-readout electric clock. Super-sensitive receiver has FET's for 10-dB signal-to-noise ratio. Delta tuning for off-frequency stations. Squelch and noise limiter. SWR meter reads forward and reflected power. RF meter; power, transmit and modulation indicators. Mechanical filter for sharp selectivity. Tilt-up base stand. 7x19x11″. With mike, all crystals. 117 VAC. Japan.
17 A 8703 U. Shpg. wt., 15 lbs. **214.95**

Johnson base model with speech compression and deluxe desk mike

224^{95} *Specially designed for base stations . . . easy-to-use press-to-talk mike*

Messenger 223. Designed by same engineering team that dev oped the famous Messenger I and II. Simplified front pa for easy operation by anyone. Receiver pulls in hard-to-g signals with its 0.05 µV sensitivity for 11 dB signal-to-no ratio. Full 3-watt audio output for high-quality receptio Illuminated S-meter and relative RF power output mete with adjustment control. Lighted full-view channel selecto too. On-off indicator light. Frequency stability, 0.005 Squelch control. Advanced tube and transistor circu 5$\frac{9}{16}$x11x9$\frac{1}{16}$″. With all crystals. For 117 VAC.
17 A 6473 U. Shpg. wt., 13 lbs. **224**

All models on these two pages include crystals for all 23 chann

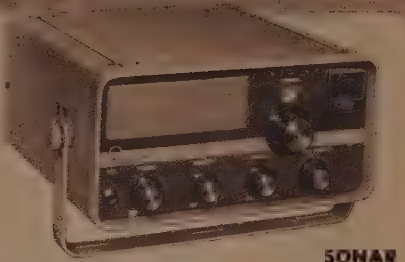
›ose from base and base/mobile models

NSON

Superb solid-state base/mobile model

39^{95} *All the latest circuit extras for professional performance*

senger 124. Built for superior communications.
t-in SWR bridge, modulation indicator, S-meter,
er output meter. Even has tone and audio gain
rols, plus volume control. Vernier tuning and
lch controls. Crystal filter for super-selectivity.
io output exceeds 3 watts. Sensitivity is 0.04 µV
a high signal-to-noise ratio. 16 tuned circuits. With
xe desk mike, all crystals. 5$\frac{9}{16}$x11x9$\frac{1}{16}$". For 117
C/12 VDC.
6501 U. Shpg. wt., 10 lbs. **289.95**


SONAR

Base/mobile unit with nuvistor front end

299^{95} *Deluxe circuit combines best features of tubes and transistors*

Model FS-23. Low-noise nuvistor in front end pulls in signals even from weakest stations. Sensitivity is 0.04 µV for 10 dB S+N/N. Has AGC, ANL and squelch for reliable reception. Audio power is a full 2$\frac{1}{2}$ watts. Illuminated S-meter. Audio gain and fine-tuning controls. Ruggedly built, excellent for mobile use. With mike, all crystals, mobile mounting bracket, AC-DC power cords. 13 tubes, 7 solid-state diodes, 2 transistors. 5$\frac{3}{4}$x11$\frac{3}{4}$x11$\frac{3}{4}$". For 117 VAC/12 VDC.
17 A 6474 U. Shpg. wt., 15 lbs. **299.95**

REGENCY

mpatible sideband-AM base/mobile model

29^{00} *Receives AM, upper and lower sidebands, transmits double sideband*

ency "Imperial." Usable with all CB 2-way radios,
gives you the extra range of double-sideband sup-
sed carrier and balanced modulation. Receives
er or lower sideband. Conventional AM operation,
Double-conversion receiver. Sensitivity, 0.05 µV
3 dB S+N/N on AM, and 0.15 µV for 10 dB S/N
SSB. S-meter also reads plate voltage and current.
array of controls. Tube cirucit. 5$\frac{1}{4}$x11$\frac{1}{2}$x9$\frac{3}{4}$".
h mike, all crystals. 117 VAC/12 VDC.
6840 U. Shpg. wt., 23 lbs. **329.00**

PACE

Silicon-transistor base unit with desk mike

330^{00} *Super-deluxe . . one of the best base station models we've ever offered*

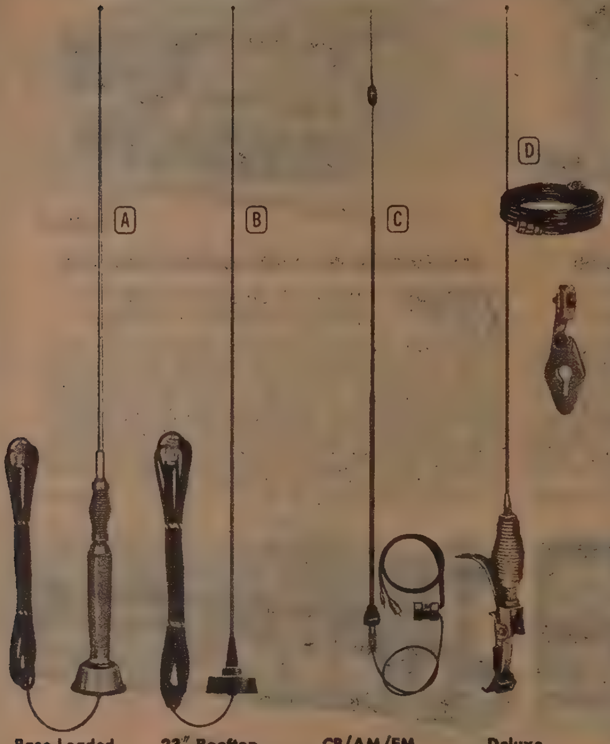
Base Model. A professional performer. All silicon transistor circuit, with double conversion receiver, for sensitivity of 0.03 µV for 10 dB S+N/N. SWR bridge and meter/RF wattmeter, plus S-meter. Speaker switch and headphone jack. RF gain control. Modulation limiter/compression amplifier for extra range. Desk mike has built-in preamp with variable output. Regulated power supply. Wood-grained case. 6x22x10". For 117 VAC. Provision for 12 VDC. With all crystals.
17 A 6442 U. Shpg. wt., 18 lbs. **330.00**

and solid-state sideband-AM base/mobile model with 10-watt PEP on SSB

compatible! Features FET's, built-in digital clock 349^{95}

3-880. Midland's best! Has every feature for
erformance. Field-effect-transistors in front
super-sensitivity. One integrated circuit.
or lower sideband selectable on SSB. Regular
AM too, for use with ordinary units. RF gain
noise blanker, SWR/RFO meters, tape jack.
r circuit. Rocker switches for PA-CB,
off-on. 13x5x9$\frac{5}{8}$". 117 VAC/12 VDC.
ll crystals, Japan.
00 U. Shpg. wt., 17 lbs. **349.95**

Allied® Mobile CB Antennas make the most of your operating power to give you longest range possible



Base-Loaded Antenna 17^{50}

23″ Rooftop Antenna 10^{95}

CB/AM/FM Antenna 12^{95}

Deluxe Whip Package 17^{50}

A **A-2581 Base-Loaded Antenna.** Easy-mounti antenna with stainless-steel shock-spring low garaging. Triple-chromed dress cup and hole "Quick-Grip" trunk mount. Easily remov —leaves no scars. Tapered stainless-steel wh with fine-tuning adjustment for perfect match 50-ohm output. Height, 45″. Solderless 16- coax cable and PL-259 connector.
17 A 6683 X. Shpg. wt., 1¾ lbs. 17

B **A-2598 23″ Rooftop Antenna.** Short anten with big performance—lets you go under s cover. Special etched-copper loading coil gi high efficiency while allowing sleek, low-pro look. Claw-mount fits into any ⅜-¾″ hole. ohms. Excellent receiving sensitivity and tra mitting efficiency for more effective communi tions. Constructed for long service and ex dependability. With claw mount, 22-ft. co cable with connector.
17 A 6684 X. Shpg. wt., 2 lbs. 10

C **A-2583 CB/AM/FM Antenna.** Replaces yo existing AM/FM whip antenna. Delivers o standing performance on CB as well as on A and FM. Extends to 50 inches, telescopes do to 28 inches for low garaging. Chrome-plat brass whip topped with high-performance loa ing coil and lifetime stainless-steel adjusta tuning rod. Isolating coupler for best CB p formance, adjustable for best AM/FM. Sing hole mount, PL-259 plug, 22-ft. coax cable.
17 A 6751 X. Shpg. wt., 3 lbs. 12

D **A-2582 Deluxe 102″ Whip-Antenna Packa** Full-size antenna system of the type used law-enforcement agencies. No-hole bum mount for quick, easy installation without ma ring car finish. Includes gutter-clip to ke whip below height of car when not in use. Hea duty stainless-steel spring prevents damage antenna. With 20 ft. of solderless coax cable a a PL-259 connector. Antenna system insta without the use of special tools.
17 A 6760 X. Shpg. wt., 5 lbs. 17

Whip Antenna and selected antenna Accessories

E **102″ Stainless-Steel Whip.** Fine taper-ground stainless-steel whip. Consists of two sections. With ⅜-24 stud for mounting. Shpg. wt., 2 lbs.
17 A 6610 X 5.50

F **Heavy-Duty Stainless-Steel Spring.** Offers superior strength and durability. ⅜-24 threads. Shpg. wt., 2 lbs.
17 A 6609 . . . . 7.50

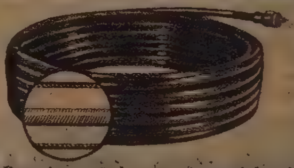
G **Bumper Mount.** Solid, permanent antenna mounting. Stainless-steel strap, chrome ball. Won't rust or break. Will give years of service. Shpg. wt., 3 lbs.
17 A 6606 X 7.50

H **Body Mount.** Stainless-steel ball adjustable 180°; steel backup plate. Easy to adjust; won't loosen under vibration.
17 A 6607. Wt., 3 lbs. . . . 8.50

J **Trunk Mount.** Installs in a jiffy. No holes to drill. Mounts in trunk groove. Chrome-plated steel.
17 A 8955 X. Wt., 12 oz. 3.95

K **Trunk Mount.** No drilling. Weatherproof triple plating. Top-cover of Cycolac® high-impact plastic. ⅜-24 thread. With 17-ft., 50-ohm solderless coax.
17 A 6685 X. Wt., 3 lbs. . . 8.95

Dearborn low-loss foam-dielectri Coaxial Cable Assemblies



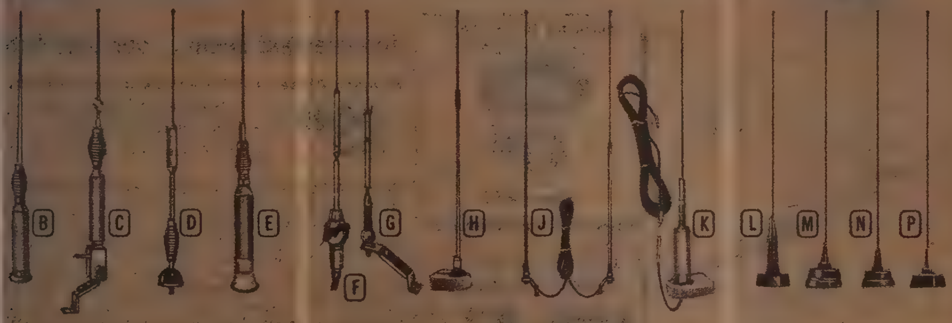
20-ft. RG-58/U
Low as
2^{95}

Premium ready-to-use coaxial cable assem with connectors attached. Polyethylene fo dielectric and non-contaminating PVC jac Cuts line loss, increases system efficiency.

RG-8/U 50-Ohm Coax Cable. Has PL-259 plug both ends for quick, easy installation.
17 A 8519. 50-ft. Coil. Shpg. wt., 7 lbs. . . . . .
17 A 8522. 100-ft. Coil. Shpg. wt., 14 lbs. . . .

RG-58/U 53.5-Ohm Coax Cable. PL-259 each e except *PL-259 one end, split lugs other end.
17 A 8530. 20-ft. Coil.* Shpg. wt., 1 lb. . . . . .
17 A 6883. 50-ft. Coil. Shpg. wt., 2 lbs. . . . . .
17 A 6884. 100-ft. Coil. Shpg. wt., 4 lbs. . . . . .

ntennas for all mobile CB two-way radios



NTENNA SPECIALISTS

)3 Combination CB/Broadcast-l Antenna. Center-loaded tele- antenna. Chrome-plated. Sin- body mount. Includes divider, es, plugs. 4 lbs.
59 X. 16.95

5 Roof Mount Antenna. 40″ base- ed stainless steel antenna, stain- el spring. Snap-in ⅜″ hole ng. 16′ RG58/U cable, PL-259. vt., 2 lbs.
31 X. .16.95

7 Trunk-Groove-Mount Antenna. base-loaded stainless steel an- and spring. Snap-in ⅜″ hole With 16′ RG58/U cable, PL- pg. wt., 3 lbs.
40 X. 19.95

30 18″ Car-Top Antenna. Center- ed antenna with tuning ad- t. Low VSWR. 2½″ stainless pring, 16′ RG58/U, PL-259. p-in mount. 2 lbs.
39 X. 13.95

76 Trunk Mount Antenna. "Quick- mount—no holes to drill. aded. Stainless steel antenna VSWR 1.5:1 or better. 16′ U, PL-259. 3 lbs.
45 X. 21.95

NEW-TRONICS

F **TCS-27-M CB/AM/FM Whip.** 2 telescoping sections. No AM or FM degradation. Weatherproof, tunable resonator. With automotive ball base and matching harness. Wt., 2 lbs.
17 A 8392 X. 16.50

G **TGF-27-L Trunk-Groove Mount Antenna.** Strong, flexible fiberglass antenna, 48″ long. With mounting hardware, 16′ coax, PL-259. 1½ lbs.
17 A 8395 X. 12.50

H **TLA-27-L Fiberglass Trunk-Lip Mount Antenna.** Fiberglass antenna armored with copper-braid and completely weatherproofed. Includes no-hole trunk-lip mount, triple-plated for weather protection; top-cover is of high-impact Cycolac plastic. With 17-ft. coax and PL-259 plug.
17 A 8380 X. Shpg. wt., 4 lbs. . . .14.95

J **SDT Super Deluxe "Double Talk" Antenna.** Consists of two FG-27 fiberglass antennas, two TGM-1 trunk-groove mounts, 18-ft. matching harness. Shpg. wt., 4 lbs.
17 A 8394 X. 24.95

K **XBLT Deluxe Base-Loaded Antenna.** Features rod of finest quality and weatherproof no-hole trunk mount. With 17-ft. coax and PL-259 plug.
17 A 8381 X. Shpg. wt., 2 lbs. . . .19.95

HY-GAIN

L **Hellcat 1 Rooftop Antenna.** Stainless steel tip rod, chrome-plated brass fittings. 48-in. high. With 22 ft. of coax, connector. Claw mounting. Shpg. wt., 3 lbs.
17 A 6160 X. 17.50

Hellcat 2 Shorty Rooftop Antenna. (Not illus.) 23-in. high. Claw mtg. 2 lbs.
17 A 6161 X. 14.95

M **Hellcat 3 Magnetically Mounted Antenna.** No holes to drill—no tools needed. Installs easily and quickly with magnetic mounting. 34⅝″ high. With 16 ft. of coax, connector. 4 lbs.
17 A 6172 X. 16.95

N **Hellcat 4 Trunk-Lip Antenna.** Mounts quickly and easily on lip of trunk lid. 47-in. high. With 22 ft. of coax, connector. Shpg. wt., 4 lbs.
17 A 6152 X. 19.95

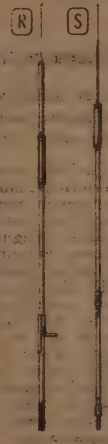
P **Hellcat Rooftop Claw-Mount Antenna.** Pretuned and factory-assembled for easy installation and top performance. Special etched-copper loading coil provides low VSWR and increased efficiency on all 23 channels. Low noise-level circuit for quieter operation. Having no spring, antenna stands straight up, even on the road. Height, 47 inches. Shpg. wt., 3 lbs.
17 A 8382 X. 14.95

NEW-TRONICS • HY-GAIN

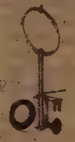
-Tronics CB-211 Bumper-Mount Antenna. ½″ ainum and brass tubing. Mast Height, 54″. with Resonator, 83″. Mast folds over at 27″ ase. ⅜-24 thread. Mount on facing page.
83 X. Shpg. wt., 2¾ lbs. 16.75

nics CB-111 Fender-Mount Antenna. Above, but er at 15″ above base. Mount on facing page.
84 X. Shpg. wt., 2¾ lbs. 16.50

ain DX Cat Topper Antenna. Offers stainless- radiator, lifetime adjustable tuning rod, lusive high-performance Hy-Q loading coil. ble mast for bumper or body mount. Order cable from page 194.
85 X. Shpg. wt., 3 lbs. 21.95

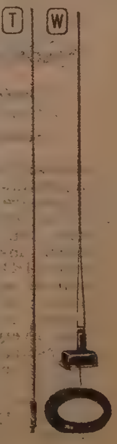


GOLD-LINE



al-Hunter Direction-Finding Anten- unts easily with suction-cup and . Tuning knob on loop. Loop is for strongest signal in receiver. ax, PL-259 plug.
63 X. Wt., 4½ lbs. 12.95

SHAKESPEARE

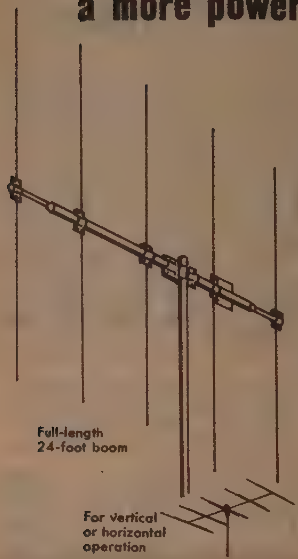


T **10-3 "The Whip" Fiberglass Antenna.** Quarter-wave whip installs with standard ball, cowl, or bumper mount. High flex-strength eliminates spring, lets antenna stand up straighter. 96-in. high, 102-in. performance with dielectric loading. Fiberglass sheath forms a protective barrier against precipitation static. SWR, 1.5:1. ⅜-24 thread.
17 A 8690 ZW. Shpg. wt., 1 lb. 8.65

W **345-1 "Perfect 36" Fiberglass Trunk-Mount Antenna.** Non-corrosive, high flex-strength antenna for long life and fine performance. Tapered pitch helical load, capacitor matching, anodized aluminum mount. 50 watts. SWR less than 2. Extends 36 in. above mount. Mounts on trunk lid by tightening two screws (wrench included). No soldering.
17 A 8686 X. Shpg. wt., 2 lbs. 21.95
17 A 8685 X. Model 345. Above less mount. Needs ¾″ hole. 1½ lbs. 14.95

nas are available on convenient Credit Terms

Allied® Citizens Band base station Antennas give you a more powerful signal . . Priced for more value, too

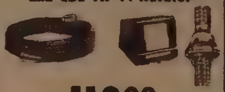


Beam and 100′ RG-58/U Coax with PL-259's

43⁹⁵

Save $4.95

Beam, 100′ RG-58/U Coax and CDE TR-44 Rotator



110⁰⁰

Save $8.85

Five-element Beam . . our best Antenn

Antenna Alone

39⁹⁵

- Full-length 24-ft. boom permits spacing for highest gain
- Highly directional beam
- 25-dB front-to-back ratio

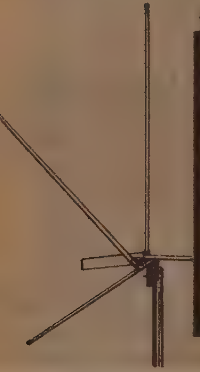
Model A-2599. Feature-for-feature this high-perfor ance five-element antenna is the best value anywhere an all-aluminum beam. The full 24-ft. boom allo proper spacing of elements for maximum gain. Eleme are 18-ft., 8¾ in. long and radiate a near-perfect dir tional pattern. Antenna delivers high forward gain 12.3 dB and has an excellent front-to-back ratio of dB or better to help eliminate interference from ot stations. Features Beta matching for low VSWR w 52-ohm coaxial cable. Can be used vertically or ho zontally. Wind load, 62 lbs. Mounts on any 1½″ ameter mast. Shpg. wt., 28 lbs.

17 A 0180 L2ZW. With 100-ft. Coax..................43

17 A 9399 ZW. Antenna Alone. Shpg. wt., 24 lbs...39

17 A 0181 L3ZW. Beam Antenna, 100-ft. Coax and TR-44 Rotator. Shpg. wt., 36 lbs.....................110

55 A 7536. 8-Conductor Rotator Cable for Above. 100 coil. Shpg. wt., 3 lbs...........................8



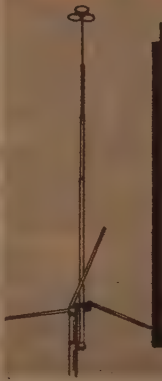
Antenna Alone

9⁹⁵

With 50′ Coax

12⁹⁵

Save $2.50



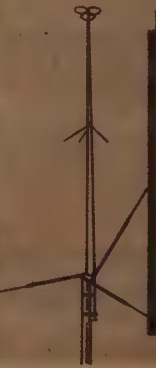
Antenna Alone

16⁹⁵

With 50′ Coax

19⁹⁵

Save $2.50



Antenna Alone

24⁹⁵

With 100′ C

28⁹⁵

Save $4.9

Special-value Ground Plane

- Omnidirectional radiation
- Three radials for wide pattern
- Seamless aluminum tubing

Model A2505A. This low—priced antenna provides long-range omnidirectional coverage. Radiator and radials are of seamless aluminum tubing. Has unity gain. Impedance, 52 ohms. Beta-match insures correct impedance match; DC ground removes static and protects against lightning. Easy to install—can be mounted against a chimney or on a 1″ to 1⅝″ diameter mast. Everything needed for immediate installation on your mast. Rust-resistant hardware. Includes 50 feet of RG58/U coaxial cable with PL-259 connectors. Shpg. wt., 5 lbs.

17 A 0025 L2X. With Coax..........12.95

17 A 6714 X. Antenna Alone. 3 lbs. 9.95

Our most popular Antenna

- Top hat for low noise level
- DC ground lightning protection
- 3.8-dB circuit gain
- Low VSWR

Model A-2570. Quality ½-wave end-fed antenna outperforms many CB antennas that cost much more. Has exclusive clover-leaf top hat for lowest possible noise level. Engineering design places entire antenna at DC ground for protection from lightning. 52-ohms. 3.8-dB circuit gain. 1.25:1 VSWR. 17-foot seamless aluminum radiator, three 52″ durable-aluminum radials. For masts 1¼ to 1⅝″ diameter. Complete, ready to install. Rust-resistant hardware. Includes 50′ of RG58/U coaxial cable with PL-259 connectors attached. 8 lbs.

17 A 0341 L2X. With Coax..........19.95

17 A 6700 X. Antenna Alone. 6 lbs. . 16.95

Deluxe Colinear Antenn

- ⅝-wave for longest range
- Solid-state matching coupler
- Excellent radiation pattern

Model A-2572. Get full-range comm ications with our finest omnidirectio antenna. 19′ 10″ aluminum radiato ⅝-wave for superior performa Solid-state matching coupler for m imum transfer of signal. 4-dB cir gain; 1.04:1 or less VSWR. Clover- top hat discharges static. Center for broadband operation. DC gro for lightning protection. Three radials. For masts 1¼-1⅝″ diame Complete, ready to install. Ru resistant hardware. Includes 50′ RG58/U coaxial cable with PL connectors attached. 9½ lbs.

17 A 0122 L2X. With Coax......2

17 A6702X. Antenna Alone. 7½ lbs. 2

SHIPPING NOTE: Items with suffix U, W or Z in stock no. sen or express. See Ordering Information page

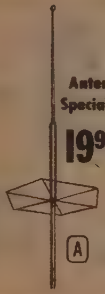
ues in high-performance CB Base Antennas

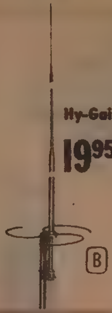
nna Specialists Mini-Skirt. Polished aluminum antenna ow-angle radiation and excellent 3-dB gain. VSWR n 1.5:1. 50 ohms. Height, 12′6″. Skirt radius only s ¾″ or 1″ masts.
94 X. Shpg. wt., 5½ lbs....................19.95

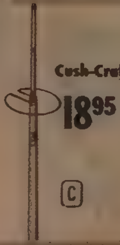
ain Goldenrod. Full ½-wave with short radials for llation virtually anywhere. Gold-iridite treated. 52 DC ground for low noise and lightning protection. 17′8″. For masts up to 1⅝″.
26 X. Shpg. wt., 6 lbs......................19.95

-Craft CR-1 "Ringo." Excellent-performing ½-wave nna with "Power-Ring" tuning. Impedance, 52 Rugged seamless aluminum tubing. Height, 17′10″. pe clamps. Phenolic base insulator.
62 X. Shpg. wt., 6 lbs......................18.95

GOOD







ti Astro-Plane Antenna. SWR less than 1.4:1. Gain, . 50 ohms. Rated 1 kW. Height, 12 ft. Heavy-duty im tubing. Resists 150-mph wind. For 1½″ mast.
27 L2X. *With Coax bonus.* Shpg. wt., 6 lbs.....32.95
35 X. **Antenna Alone.** Shpg. wt., 4 lbs..........29.95

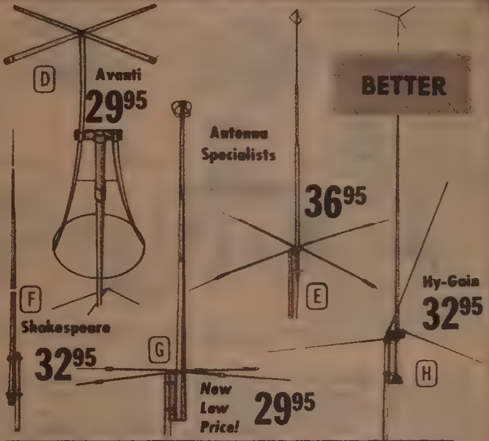
nna Specialists Mighty-Magnum III. ½-wave antenna ¼-wave radials only 60″ long. Height, 17′6″. 4-dB 4:1. VSWR. Seamless aluminum.
90 L2U. *With Coax Bonus.* Shpg. wt., 12 lbs. .39.95
27 X. **Antenna Alone.** Shpg. wt., 10 lbs.........36.95

espeare 176 "Big Stick." ½-wave, 2-section, fiber-. Center-fed. Choke-stub in base. Height, 18½-ft. ″ mast. 50 ohms. Accepts PL-259.
91 L2ZW. *With Coax Bonus.* Wt. 10½ lbs.....35.95
58 ZW. **Antenna Alone.** Shpg. wt., 8½ lbs......32.95

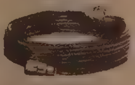
nna Specialists Super Magnum. 6-dB S/N improvet. 3.75-dB gain. Ball reduces static. High-Q phasohns. Low-angle radiation. For up to 1½″ masts.
39 L2X. *With Coax Bonus.* Shpg. wt., 9 lbs....32.95
96 X. **Antenna Alone.** Shpg. wt., 7 lbs..........29.95

ain CLR-II. ⅝-wave ground-plane. 4-dB gain— 8-dB it gain. SWR, 1.2:1. 52 ohms. 19′10″ radiator; three dials. Aluminum. For 1¼-1⅝″ masts.
36 L2X. *With Coax Bonus.* Shpg. wt., 9 lbs....35.95
22 X. **Antenna Alone.** Shpg. wt., 7 lbs..........32.95

BETTER



BONUS OFFER! SAVE $2.50



only $3 more

Reg. $5.50 Value
50 ft. RG-58/U
with 2 PL-259's

ain "Big Gun." Selectable polarity, 4-element quad. -dB gain. Front-to-back, 38.7-dB. SWR, 1.24:1. is. Boom Length, 20-ft.; Diameter, 2″.
92 L2ZW. *With Coax Bonus.* Shpg. wt., 54 lbs. 152.50
46 ZW. **Antenna Alone.** Shpg. wt., 52 lbs.......149.50

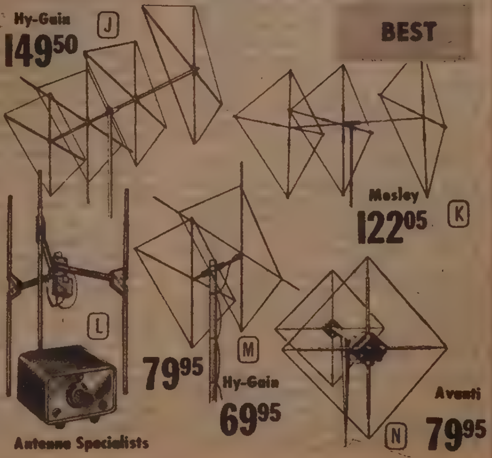
ley MCQ-27VH. Selectable polarity, 3-element quad. 3 gain. Front-to-Back, 25 dB. Gamma match. Impe, 52 ohms. Includes polarity switch.
93 L2ZW. *With Coax Bonus.* Shpg .wt., 30 lbs. 125.05
47 ZW. **Antenna Alone with Switch.** Wt., 28 lbs. 122.05

nna Specialists MR-119. Rotates signal electronically; omnidirectional position. 7.5-dB gain. 23-dB F/B. is. For 1½-2″ masts. Needs 4-wire rotator cable.
94 L2ZW. *With Coax Bonus.* Shpg. wt., 20 lbs. 82.95
48 ZW. **Antenna Alone.** Shpg. wt., 18 lbs.......79.95

ain Quad Antenna. Selectable polarity, 2-element d. Directivity and high front-to-back ratio of a but smaller and lighter. Reduces interference.
26 L2ZW. *With Coax Bonus.* Shpg. wt., 19 lbs. 72.95
45 ZW. **Antenna Alone.** Shpg. wt., 17 lbs......69.95

nti PDL-27A. Selectable polarity, 2-element quad. IB gain. Front-to-back, 30 dB. VSWR, 1.2:1. 50 Power Capacity, 1000 watts. For up to 1½″ masts.
95 L2ZW. *With Coax Bonus.* Shpg. wt. 17 lbs. 82.95
29 ZW. **Antenna Alone.** Shpg. wt., 15 lbs.......79.95

BEST



PING NOTE: Items with suffix U, W, or Z in stock no. sent truck or express. See Ordering Information pages.

Big values in popular Station Accessories

A

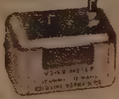
49^{50}

C

5^{95}

D

9^{95}



E

13^{25}

F

14^{9}

G

19^{95}

H

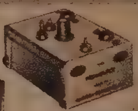
21^{95}

J

9^{95}

B

49^{95}



K

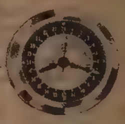
11^{95}

L

8^{95}

M

2^{50}



N

8^{95}

P

49^{50}

R

15^{95}

S

5^{95}

A Drake CB Directional RF Wattmeter. Negligible insertion loss allows continuous monitoring of forward or reflected power and of transmitter/antenna performance. Impedance, 50 ohms. Accuracy, ±5%. Rated 10 watts. With SO-239 jacks. 6x3$\frac{11}{16}$x4″.
17 A 6784 X. Shpg. wt., 3 lbs....49.50

B Ameco PCB CB Receiver Preamplifier. Solid-state preamp increases receiving gain and sensitivity of any CB individual or 2-way radio receiver. Built-in transfer-relay lets you feed antenna of and mute a second receiver. Preamp is bypassed during transmission. Connects without modification of receiver. Built-in power supply, "On the Air" light. 5½x3¼x3″. Cables. 115 VAC.
17 A 6599 X. Shpg. wt., 5 lbs....49.95

C Field-Strength Meter. 1-250 MHz. 3¼x3½x1½″. From Japan.
17 A 6589. Shpg. wt., 10 oz.......5.95

D SWR/FS Meter. Reads forward and reflected power, SWR from 1:1 to 1:3, field strength. 1 kW. 2-30 MHz. 6x2¼x2¾″. From Japan.
17 A 6588. Shpg. wt., 10 oz.......9.95

E Gold Line SWR Mini-Bridge. Negligible insertion loss. 500 watts average power. 50 ohms. Extra scale for relative power. 1⅝x2¾x1¾″. With universal mounting bracket.
17 A 6775. Shpg. wt., 8 oz.......13.25

F Johnson Antenna Meter. Checks impedance match to antenna. Reads SWR to 10:1. Handles 500 watts modulated. 4½x2¾x2$\frac{1}{16}$″.
17 A 8954. Shpg. wt., 3 lbs......14.95

G Transicheck Relative Power Output/SWR Meter. Helps you get more power into antenna. No line-loss or detuning when inserted in feed line; can be left in line. Accurately balanced; calibrated in SWR. 52 ohms. Microammeter. 5½x2¼x2½″.
17 A 8160. Shpg. wt., 2¼ lbs....19.95

H Dualmeter for SWR and Power. Accurate, simultaneous readings of RF output and reflected power with dual 1-μA movement. Handles up to 2000 watts, 175 MHz. Low insertion loss; can be left in line. 4¼x2¼x2½″.
17 A 9821. Shpg. wt., 2 lbs......21.95

J Gold Line GLC 1050 Output Power Sensor and Dummy Load. Get the greatest power transfer between transmitter and antenna. Knowing your actual output power, you can adjust transmitter and antenna for best power output. Makes use of any handy VOM, converts volts to watts. Easy to use, accurate. 52 ohms. 4x1⅝x1½″.
17 A 6776. Shpg. wt., 6 oz.........9.95

K Ameco PV-27 Nuvistor Preamplifier. Improves gain and noise figure when used ahead of receiver converter. High gain. Noise, 2 dB at 27 MHz. Requires 100-150 VDC at 8 mA and 6.3 volts at 135 mA. 1½x2x3″.
17 A 6421. Shpg. wt., 1 lb.........11.95

L Line Matcher. Provides low SWR and excellent power transfer to antenna. Features 100-watt power capacity, broadband tuning, screwdriver adjustments. Has two SO-239 connectors. Size, 3¾x1⅝x2″.
17 A 8375. Shpg. wt., 4 oz.........8.95

M Cesco "Phantom" Dummy Load. Le you tune your transmitter withou causing interference. Replaces anten na. (FCC regulations prohibit tunin or other adjustments with an anten na connected.) 52 ohms. With standar UHF connector. Power rating ampl for any CB 2-way radio.
17 A 8505. Shpg. wt., 6 oz........2.5

N Mastercrafters 191 Clock. 24-hou dial. 8″ chrome case. Shows worl time. For 110 V, 60 Hz AC.
17 A 8472. Shpg. wt., 1½ lbs....8.9

P Demco VM-12-20 Power Modulato Increases talk-power of any trans mitter. Rated 1 kW. With 110-12 VAC cable. Size, 8x6¾x8¾″.
17 A 8347 X. Shpg. wt., 12 lbs...49.5
17 A 6406. DC Cable. Wt., 1 lb....3.0

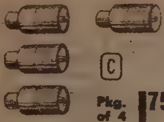
R Johnson Antenna Matchbox. Provide a nearly perfect match betwee transmitter and antenna system. Jus place it in the antenna transmissio line, and leave it there. Corrects SW of up to 5:1, reducing it to 1.1:1 o better. Handles up to 15 watts. 26. 30 MHz. 4x3¼x2⅜″.
17 A 6802. Shpg. wt., 3 lbs......15.9

S Gold Line GLC 1051 TVI Filte Eliminates TV interference cause by CB transmissions. Harmonic rejection minimum of 40 dB. Feature tuning-control knob allowing maximum TVI rejection—lets you solve your unusual TVI problems. Install between your antenna and transmitte Just adjust filter tuning knob unti TVI is corrected. Size, 2¾x1½x1½″.
17 A 6777. Shpg. wt., 6 oz.........5.9

improved performance on Citizens Band

A 6⁵⁹

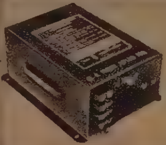
B 8⁹⁵

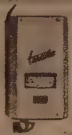

C Pkg. of 4 1⁷⁵

D 3⁹⁵

R 44⁹⁵

E 19⁹⁵


F 29⁹⁵


G 18⁷⁷

H 79c

J 3⁴⁵

K 3⁹⁵

L 15⁵⁰

Weather-Guard
S 1²⁴

M 4⁹⁵

N 22⁹⁵

P 12⁹⁵

Line GLC 1048 2-Position Coax-witch. No need to switch anten-s—just turn knob of this quali-ial switch and instantly change ne antenna to another. Size, ".
78. Shpg. wt., 1 lb. 6.59

ition Coaxial Switch. 2-pole, 5-tion switch rated 1 kW. For neters, including 11-meter CB.
44. Shpg. wt., 3 lbs. 8.95

59 Coaxial Connectors. Meet ary specifications. Completely ot replated. **Pkg. of 4.**
43. Wt., 8 oz. . . . . . . **Pkg. 4/1.75**

-Bug" Lightning Arrester. Has e 83 connectors.
44. Shpg. wt., 4 oz. 3.95

and 18-805 Regulated AC Adapt- Specifically designed as power for Midland Models 13-850, 13-d 13-870 two-way radios. Can with any base station requiring egulated 12-VDC, 2-amp sup-e, 7¾x6½x2½". 115 VAC.
91 X. Shpg. wt., 3 lbs. . . . 19.95

k BBR-1216 Solid-State Battery-r Regulator. Provides stable, nt 15.5 VDC to mobile CB and ss Band 2-way radios. Boosts voltage to a higher value when ttery voltage varies. Internally ble to 12-16 volts. Excellent ion from no-load to full rated of 2 amps. Protects against Input 11-16 VDC. On-off Screw terminals. 4x6½x2⅝".
44 X. Shpg. wt., 2½ lbs. . 29.95

G **Terado 50-150 AC Line Monitor-Regulator.** A welcome addition to the CB base station. Lets you increase 117-volt line to 140 volts or decrease it to 80 volts. Permits continuous power-line monitoring. Reduces frequency drift. Capacity, 300-500 watts. Six-position switch and built-in AC voltmeter. Size 5½x3x2¼".
17 A 6788 X. Shpg. wt., 3½ lbs. . 18.77

H **Magnetic Mike Clip.** A real convenience for mobile use.
17 A 6461. Shpg. wt., 3 oz. . . . . . .79¢

J **Generator Noise Filter.** Eliminates radio interference caused by annoying whine and grinding noises created by generator brushes. Tunable from 3 to 30 MHz. With mounting bracket.
17 A 8512. Shpg. wt., 5 oz. 3.45

K **Alternator Noise Filter.** Nontunable filter designed to effectively eliminate receiver noises caused by car alternator systems. Not critical as to frequency or voltage—operates on any voltage up to 32 volts.
17 A 8410. Shpg. wt., 2 oz. 3.95

L **Johnson Noise Suppressor Kit.** Eliminates ignition and other electrical interference originating in the vehicle. A complete kit including all capacitors, resistors, and wire.
17 A 6010. Shpg. wt., 2 lbs. 15.50

M **Ameco LN-2 TVI Filter.** Reduces TV/FM interference. Suppresses radiation of spurious signals above 40 MHz. Negligible insertion loss. 200 watts. 10-160 meters. 52-75 ohm lines. SO-239 connectors, bracket.
17 A 8454. Shpg. wt., 1 lb. 4.95

N **Johnson Solid-State In-Converter.** Handy compact unit for converting 6 VDC to 12 VDC (1.1A), 12 VDC to 24 VDC (0.6A), etc. Also changes negative ground to positive, positive ground to negative. 6x2½x3¾".
17 A 6803. Shpg. wt., 3 lbs. 22.95

P **Hy-Gain Ferrite Balun BN-27A.** Makes the big difference in antenna system performance. Couples 52-ohm unbalanced transmission line into 52-ohm balanced system (beam antenna). Improves power transfer to antenna and eliminates stray RF from feedline and tower. Covers all CB channels. Mounts easily on boom or mast.
17 A 8241. Shpg. wt., 1 lb. 12.95

R **Courier Port-a-Lab Ham-CB Tester.** Monitors transmitter and helps assure proper operation. Completely portable for use at base or field location. Lets you test significant operating factors that previously required two or more separate instruments. Measures SWR, true RF power to 50 watts, modulation percentage, relative field strength. Audibly checks modulation distortion. 6x8x3½".
17 A 6532 X. Shpg. wt., 5 lbs. . . . 44.95

S **Mosley Weather-Guard Antenna Coat.** Weatherproof your antenna and assure extra years of service at top performance. Fast-drying, clear-coating compound protects against corrosive action of salt, water, moisture, and ultra-violet radiation. Will not discolor antenna. Applies easily and quickly with a brush. 8 ounces, net.
17 A 8243. Shpg. wt., 1 lb. 1.24

CTS/Knights Citizens Band Crystals . . precision-ground to 0.003% tolerance that exceeds FCC requirements

Each crystal comes in protective plastic box

The frequency-accuracy of your Citizens Band equipment can be no better than that of the crystals used in the equipment. CTS/Knights crystals are accurate and stable. They exceed FCC requirements with a frequency-tolerance of 0.003%. Each crystal is made under exacting conditions and inspected at every step of assembly. Crystals for CB models are either precision 3rd overtone or series-resonant types as dicated in manufacturer's specificati Each crystal is in a plastic box. *In ta below indicates no crystal is required. **Order:** Use Stock No. indicated in ta below, and specify channel desired (1- Shpg. wt., 3 oz. **(Channels May Be Asso for Quantity Price.)**

Ea. 2.50 3-9...Ea. 1.94 10-Up...Ea.

Crystals for Allied, Knight, and Lincoln Citizens Band Equipment and Walkie-Talkies

Model No.	Stock No.	
	Transmit	Receive
KN-2500, KN-2550, KN-2580	17 A 9366 CS	17 A 9358 CS
A-2507, KN-2520, KN-2522	17 A 9394 CS	17 A 9409 CS
A-2530	17 A 9394 CS	17 A 9395 CS
L-2540, L-2541, L-2542, A-2543, A-2544, A-2545	17 A 9369 CS	17 A 9401 CS
KN-2585	17 A 9366 CS	17 A 9358 CS
KN-2590	17 A 9354 CS	17 A 9360 CS

Model No.	Stock No.	
	Transmit	Receiv
L-2700	17 A 9353 CS	17 A 937
L-2700A	17 A 9366 CS	*
L-2710	17 A 9369 CS	17 A 937
Knight-Kit C-22, C-560	17 A 6602 CS	17 A 935
Knight-Kit C-540	17 A 6602 CS	*
Knight-Kit C-555, KG-4000A	17 A 9353 CS	17 A 937
Knight-Kit Safari II, III, IV	17 A 9394 CS	17 A 940

Crystals for Other Popular Citizens Band Equipment and Walkie-Talkies

Manufacturer and Model	Stock No.	
	Transmit	Receive
Allstate—see Sears-Roebuck		
Amphenol 510B	17 A 6600 CS	17 A 6601 CS
Amphenol 600, 625, 650, 675	17 A 6600 CS	17 A 9963 CS
Amphenol 750, 725	17 A 6600 CS	17 A 9343 CS
B&K Cobra 5	17 A 9394 CS	17 A 9409 CS
Cadre 500	17 A 9394 CS	17 A 9370 CS
Cadre 510, 510A, 515, 520	17 A 6600 CS	17 A 6601 CS
Citifone 5A, 6, 7, 11, 99	17 A 9371 CS	17 A 9372 CS
Claricon Century	17 A 9369 CS	17 A 9401 CS
Courier AGS200	17 A 9366 CS	17 A 9358 CS
Courier Fleet, A-58	17 A 9354 CS	17 A 9363 CS
Courier TR-5, TR-6	17 A 6600 CS	17 A 9401 CS
Courier 12	17 A 9366 CS	17 A 9363 CS
Demco Satelite	17 A 6604 CS	*
Demco Chalet	17 A 9369 CS	17 A 9401 CS
Demco Ravelle	17 A 6604 CS	17 A 9378 CS
Dewald TR1000, R1050, F1050	17 A 9366 CS	17 A 9358 CS
E.C.I.—see Courier		
E. F. Johnson Personal Messenger	17 A 9353 CS	17 A 9375 CS
E. F. Johnson Messenger I, II	17 A 9352 CS	17 A 9362 CS
E. F. Johnson Messenger 100, 109, 110	17 A 9394 CS	17 A 9401 CS
E. F. Johnson Messenger III, 300	17 A 9394 CS	17 A 9963 CS
Eico 770-772, 777	17 A 9371 CS	17 A 9356 CS
Eico Sentinel 12, 712	17 A 9366 CS	17 A 9360 CS
Fanon DCL-50, RCB-10, FCB 11, 12, 13, 55, 90, 91, L-1000, L-2000	17 A 9394 CS	17 A 9401 CS
Fanon IC-10, IC-1000, IC-3000, IC-5000	17 A 6600 CS	17 A 9401 CS
Fanon SFT-600	17 A 9394 CS	17 A 9963 CS
General MC1, MC2, MC3	17 A 9366 CS	17 A 9363 CS
General MC4, MC5, MC6, EM5, EM6	17 A 9354 CS	17 A 9363 CS
General Echo 9	17 A 9369 CS	17 A 9401 CS
Globe CB100	17 A 9366 CS	17 A 9357 CS
Globe CB100A	17 A 9366 CS	17 A 9363 CS
Globe CB200	17 A 9350 CS	17 A 9357 CS
Hallicrafters CB2, CB3A, CB5A, CB7, CB9, CB10, CB17, CB27	17 A 9352 CS	17 A 9359 CS
Hallicrafters CB12, CB19, CB21	17 A 6600 CS	17 A 9407 CS
Hallicrafters CB6	17 A 9353 CS	17 A 9375 CS
Hallicrafters CB20	17 A 6600 CS	17 A 6603 CS
Heath CB2, GW10, 11, 12, 22, 32, 34, 42, MW30, MW33	17 A 9366 CS	17 A 9360 CS
Heath G14, GW21, GW52, GRS-65A	17 A 9353 CS	17 A 9365 CS
Int'l Executive 50, 100, 100A, 100C, 100D, CTZ-50, CTZ-5A2, CTZ-5B2	17 A 9354 CS	17 A 9374 CS
Karr Sky Hawk (Crystal for Transmit and Receive 17 A 9345 CS)		
Karr Sky Lark	17 A 6600 CS	17 A 9345 CS
Knight and Knight-Kit—see table above		
Lafayette HE15, 15B, HB115, 115A	17 A 9366 CS	*
Lafayette HE20, 20A, 20B, 20C, 23, 24, 43B, 43C, 65, 90	17 A 9366 CS	17 A 9358 CS
Lafayette HE20J, HA450, Dynacom 5, 6	17 A 9394 CS	17 A 9401 CS

Manufacturer and Model	Stock No.	
	Transmit	Receiv
Lafayette HE29 (very early), HA64, 65	17 A 9353 CS	17 A 936
Lafayette HE29 (except very early), HE29A, 29B, H10TC, HE31, HE66, 82, 83	17 A 9366 CS	17 A 936
Lafayette HE29C, HA60, HA62, HE85, 86, GT-50, HE75, HE88, HA99, HE100, 100A, HA130, 135, 150, 210, 295, 303, 711, Dynacom 2, 3	17 A 9354 CS	17 A 935
Lafayette HB111, HB200	17 A 9354 CS	17 A 935
Lafayette Comstat 9, 19	17 A 9354 CS	17 A 936
Lincoln—see table above		
Lloyds 7A08, 7A11, 8A22	17 A 9369 CS	17 A 940
Metrotek "Colt 23"	17 A 9408 CS	*
Metrotek "Mustang," 65 & II, "Pacer"	17 A 9354 CS	17 A 936
Metrotek "Pacer II"	17 A 9408 CS	17 A 940
Midland 13-042, 13-105, 13-106, 13-108, 13-110, 13-111, 13-113, 13-113B, 13-120, 13-124, 13-124C, 13-125, 13-132, 13-133, 13-143, 13-150, 13-410, 13-425, 13-428, 13-430, 13-700, 13-710, 13-722, 13-724, 13-730, 13-732, 13-760, 13-765, 13-770, 13-772, 13-775, 13-775B, 13-855	17 A 9369 CS	17 A 940
Monarch TC900, TC66	17 A 9369 CS	17 A 940
Olson Spotter 1, 2, RA530	17 A 9366 CS	*
Olson RA396, RA442	17 A 9366 CS	17 A 935
Olson RA446	17 A 9369 CS	17 A 940
Olson RA482, RA52	17 A 9366 CS	17 A 936
Olson 717	17 A 9354 CS	17 A 936
Pace I, II, IIs, 5000	17 A 6600 CS	17 A 940
Pearce Simpson Companion III	17 A 9394 CS	17 A 940
Polytronics Poly Pup	17 A 6600 CS	17 A 940
Raytheon TWR5, 6, 7, 8, 9, 11	17 A 6600 CS	17 A 660
RCA Mark VIII, IX	17 A 6602 CS	17 A 935
RCA Mark X	17 A 6600 CS	17 A 940
Realistic CBK1, TRC27A	17 A 9366 CS	17 A 936
Radio Shack—see Realistic		
Regency 500, Bronco, Charger	17 A 6600 CS	17 A 940
Regency Ranger	17 A 6600 CS	17 A 941
Regency—see Metrotek		
Sears-Roebuck Cat. No. 6450, 6455	17 A 9369 CS	17 A 940
Sears-Roebuck Cat. No. 6550	17 A 9352 CS	17 A 935
Sears-Roebuck Cat. No. 6552	17 A 6600 CS	17 A 940
Sears-Roebuck Cat. No. 6556	17 A 9394 CS	17 A 940
Sears-Roebuck Cat. No. 6558	17 A 9394 CS	17 A 996
Sonar E (below serial no. 915)	17 A 9377 CS	17 A 936
Sonar E (above serial no. 915)	17 A 9377 CS	17 A 937
Sonar G	17 A 6604 CS	17 A 937
Sonar H	17 A 9368 CS	17 A 937
Squires Sanders S5S	17 A 6600 CS	17 A 934
USL TR1000, TR1050, Contact 6	17 A 9366 CS	17 A 935
USL Contact 8	17 A 9354 CS	17 A 935

Full-power 5-watt Walkie-Talkies with integrated circuits

SYNTHESIZED
VOLUME
SQUELCH
MIDLAND
Midland

23 Channels

149⁹⁵

$8 monthly
See page 438

Crystal-controlled transmit and receive on all 23 channels—no crystals to buy

12 Channels

99⁹⁵

$5 monthly
See page 438

High sensitivity tuned RF stage, plus Call Signal . . and handsome leather case

exe model has dual conversion and six IF ages for high selectivity and sensitivity

d 13-790. Now in a walkie-talkie, frequency synthe-
ransmit and receive on all 23 Citizens Band channels.
'ou get full 5-watt RF input for maximum range.
het receiver has integrated circuit, dual conversion
x IF stages for high selectivity and good image rejec-
o prevent interchannel interference. Combination
er/mike with push-to-talk switch; RF output/signal
th/battery meter; on-off/volume control; squelch
l; Charge/Power switch; PA/CB switch; channel
or. Noise limiter. Jacks for PA speaker, earphone,
al mike, battery charger and AC adapter. 15 transis-
ener diode. Metal cabinet with die-cast grille. 14x
". With leather case, security strap. Order 8 "AA"
ne or rechargeable Ni-cad batteries, below. Japan.
811 S. Shpg. wt., 7 lbs. 149.95

With Call Signal that announces your incoming message to other units . . IC's in IF, too

Midland 13-772. Powerful 5-watt RF input for maximum-range two-way CB communications. Versatile 12-channel capability. Superhet receiver has tuned RF stage for high sensitivity and reliable integrated circuit IF. Combination speaker/mike with push-to-talk switch. RF output/signal strength/battery meter. Call signal alerts other units of this model. On-off/volume control; squelch control; Charge/Power switch; PA switch; channel selector; AGC. Jacks for AC adapter, battery charger, external antenna, mike, PA speaker, earphone. Metal cabinet, $9\frac{3}{4}$x$2\frac{3}{16}$x3". With leather case, carrying strap, earphone, Channel 7 crystals. Order 8 "AA" alkaline cells or nickel-cadmium pack below. Extra crystals on page 200. From Japan.

17 A 9812 S. Shpg. wt., 6 lbs. 99.95
17 A 9813 S. Midland 13-770. Above, 6 channels. 89.95

Get the most from your walkie-talkie with these accessories

Midland 18-137 Battery Pack. For
1-watt units and up. Strap. Req. 8
g-life "D" batteries, at right.
A 9819. Wt., 11 oz. 6.95

Midland 18-143C 117 VAC Power
Supply/Charger. Makes walkie-
kies 117 VAC base station. Re-
rges nickel-cadmium batteries.
A 9712 S. Wt., 2 lbs. 22.95

Midland 20-112 Rechargeable pack
with Ni-Cadmium Batteries.
A 9769 S. Wt., 11 oz. 14.95

Midland 20-212 Ni-cad Batt. charger.
17 A 9643. Wt., 6 oz. 5.95

E **Midland 18-141. 12-VDC Auto Cable.** Plugs in cigarette lighter socket.
17 A 9645. Wt., 4 oz. 1.95

F **Alkaline "D" cells.** Wt., 10 oz.
18 A 5346. . . . . . . Pkg. of 2 for 1.27

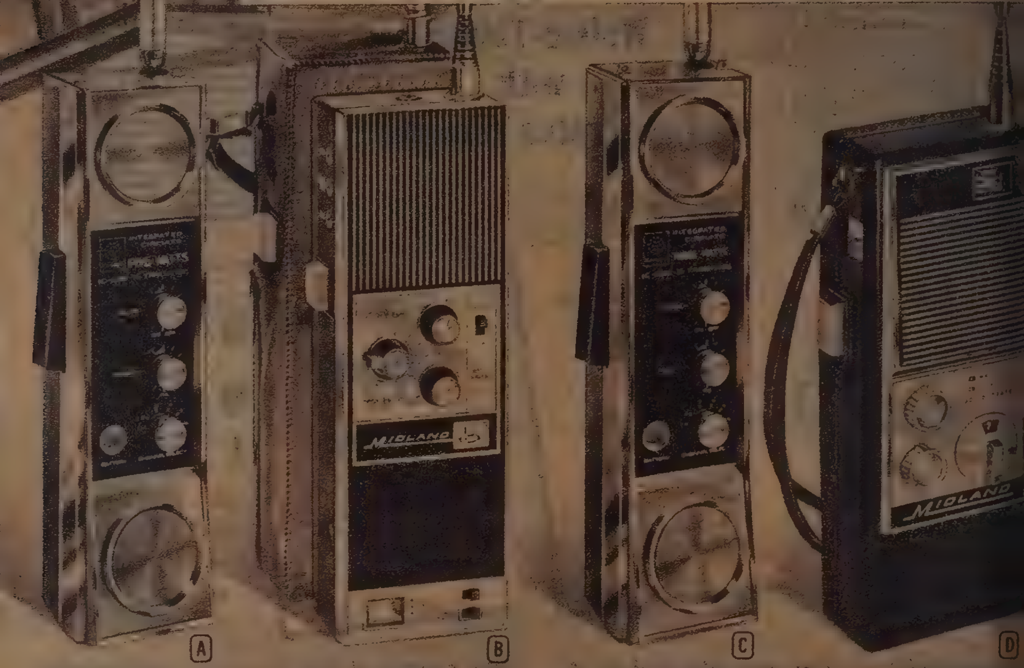
G **Alkaline "AA" Batteries.** Wt., 4 oz.
18 A 5131 . . . . Pkg. of 2 for 79¢

H **Replacement Antenna.** Ideal for replacement of broken antenna or where full antenna length is not satisfactory. Shpg. wt., 1 lb.
17 A 6371 . . . . 3.95

Extra Rechargeable Ni-cad Batteries.
18 A 5636. Wt. 3 oz. . . . . **Each 1.95**

license needed for walkie-talkies with over 100-mW power—no exam

High-power Walkie-Talkie



5 watt
6 channel
99^95

5 watt
6 channel
89^95

3 watt
6 channel
79^95

3 watt
3 channel
69^95

A Integrated circuits plus power-boost

Fanon IC-5000. Five-watt input power and up to six channels. Antenna has power boost loading coil. Superhet receiver, high selectivity ceramic filter. Integrated circuits for high reliability. Noise limiter; automatic gain control; battery indicator/RF meter; PA facility. Jacks for external antenna, external speaker, battery charger. Hand strap, shoulder strap. Channel 9 crystals. Metal case. $10\frac{1}{2}$x$1\frac{3}{4}$x$1\frac{5}{8}$". Order 10 alkaline batteries below. Japan.
17 A 9861 S. Shpg. wt., 4 lbs. **99.95**

B Integrated circuits and four IF stages

Midland 13-775B. Five-watt input power and up to six channels. Tuned RF stage. Speaker/mike; push-to-talk switch; RF output/signal strength meter; squelch control; PA facility; automatic gain control. Battery saver switch. Jacks for ext. antenna, earphone, ext. speaker, mike, PA speaker, battery charger. Metal case. $9\frac{3}{4}$x$4\frac{1}{3}$x$2\frac{3}{16}$". Case, carrying strap, Channel 7 crystals. Order 8 alkaline batteries (below) or 10 rechargeable ni-cad batteries (pg. 201).
17 A 9825 S. Japan. Shpg. wt., 5 lbs. **89.95**

C Integrated circuits, power-boost antenna

Fanon IC-3000. Three-watt input power and up to six cha
nels. Three integrated circuits for superb performan
Automatic noise limiter; automatic gain control; batte
strength indicator/RF power meter; separate speaker a
mike. Controls include: on-off/volume, squelch, chan
selector, push-to-talk button. Has hand strap and should
strap. $10\frac{1}{2}$x$1\frac{3}{4}$x$1\frac{5}{8}$". Channel 9 crystals installed. Ord
10 alkaline batteries below. Japan.
17 A 9862 S. Shpg. wt., 4 lbs. .... **79.**

D Tuned RF stage improves image rejectio

Midland 13-730. Three-watt input power and up to th
channels. Tuned RF stage; four IF stages. High leve
push-pull audio modulation. AGC. On-off/volume, varia
squelch, battery charger, channel selector, push-to-ta
Accessory jacks for AC adapter, battery charger, exter
antenna, earphone. Comination battery condition/po
meter. Metal case, $9\frac{3}{8}$x$3\frac{1}{2}$x$2\frac{1}{2}$". With carrying str
Channel 11 crystals. Order 8 alkaline batteries. Japan.
17 A 9826 S. Shpg. wt., 4 lbs. .... **69.**

ACCESSORIES

18 A 5131. "AA" Alkaline Batteries. Wt., 4 oz. . **Pkg. of 2/79¢**
AC Adapter/12-V Battery Charger. (For Midland units only).
17 A 9712 S. Shpg. wt., 2 lbs. **22.95**

Fanon CHB-4. AC Adapter/Battery Charger. Only for Fa
models IC-5000 and IC-3000. Shpg. wt., 3 lbs.
17 A 9816 .... **26.**

Buy any walkie-talkie on these two pages for only $5 monthly . . see page 4

p to 5 watts, 6 channels

MIDLAND
MIDLAND
E
F
G
H

E
2 watt
3 channel
59⁹⁵

F
2 watt
3 channel
49⁹⁵

G
1 watt
3 channel
39⁹⁵

H
1 watt
2 channel
29⁹⁵

E Push-pull audio and Call Signal

nd 13-732. Two-watt input power and up to three
d-controlled channels. Sensitive superhet receiver
push-pull Class B high-level modulation. Separate
er and mike. Battery-condition meter. 48-inch tele-
ng antenna. Input jacks for optional AC adapter,
ry charger, and earphone. Diecast metal case, 10½x
". Earphone, strap. Ch. 11 crystals. Order 8 "AA"
ne batteries or Ni-Cad battery pack (pg. 201).
807 S. Japan. Shpg. wt., 3 lbs. 59.95

F Features separate speaker and mike

nd 13-724. Two-watt input power and up to three
nels. Superhet receiver with tuned RF stage improves
ivity and image rejection. Integrated circuit; push-
udio; automatic gain control. Call Signal. Battery
. On-off/volume, variable squelch, channel selector,
to-talk. Jacks for battery charger, AC adapter, ear-
. Metal case, 7½x2¾x2⅛". Earphone, case, strap,
1 crystals. Order 8 "AA" alkaline batteries.
827 S. Japan. Shpg. wt., 3 lbs. 49.95

G Features RF stage and Call Signal

Midland 13-710. One-watt input power and up to three channels. Superhet receiver with tuned RF stage. Automatic volume control reduces blasting and fading. Adjustable squelch circuit silences speaker between calls. Call Signal for alerting other units of this model. Battery-condition meter; jacks for optional AC adapter, battery charger, earphone. Metal case, 7¾x2¾x2". Carrying strap, Ch. 11 crystals. Order 8 "AA" alkaline batteries.
17 A 9805 S. Japan. Shpg. wt., 4 lbs. 39.95

H Tuned RF stage and three IF's

Midland 13-700. One watt input power and up to two channels. Superhet receiver with tuned RF, automatic gain control, and three IF stages for high selectivity. High-level class B push-pull audio modulation. Call Signal alerts other units of this model. Controls include: on-off/volume, variable squelch, channel selector, push-to-talk button. Jacks for AC adapter/battery charger, earphone. Metal, 7x2½x 2". Strap, Channel 11 crystals. Order 8 "AA" batteries.
17 A 9828 S. Japan. Shpg. wt., 2 lbs. 29.95

ACCESSORIES

nd 18-140 AC Power Supply. For Midland walkie-
s up to three watts only.
818. Shpg. wt., 3 lbs. 18.95

For extra crystals for walkie-talkies on these pages, see crystal listings on page 200

license needed for walkie-talkies with over 100-mW power—no exam

100-mW Walkie-Talkies for all uses

16^{50}
19^{95}
MIDLAND
Our lowest price for any superhet Walkie-Talkie
11^{95}
CALL SIGNAL
SOLID STATE TRANSCEIVER

3-channel with Call Signal

Midland 13-428. An amazing low price for a 3-channel walkie-talkie. Superhet receiver has two IF stages for good selectivity. Push-pull output. Special Call Signal circuit alerts other units of this model. On-off switch/volume control; channel selector; push-to-talk; external jacks for AC adapter, earphone. 2¼" speaker. 44" telescoping antenna. 9 transistors. High-impact black polystyrene case with metal grille. 5¾x2⅝x1⅜". With case, Channel 11 crystals, earphone, 9-V battery. Japan. Shpg. wt., 1¼ lbs.
17 A 9814 S. **16.50**

Deluxe 2-channel . . Call Signal

Midland 13-430. High-performance model has 2 channels, plus Call Signal for selective communication. Extra-sensitive superhet receiver and high-efficiency 100-mW transmitter give you performance not expected at this low price. Dynamic speaker/mike for excellent voice clarity. Battery charger jack, AC adapter jack, earphone jack. Volume control, push-to-talk switch, telescoping antenna. Heavy-duty metal case, 5½x2¼x1⅝". With carrying strap, 9-volt battery, Channel 11 crystals. Japan. Shpg. wt., 1 lb.
17 A 9718 S. **19.95**

1-channel with Call Sign

Midland 13-425. Sensational low p
for a walkie-talkie with superhet
ceiver for good reception, plus a
Signal to alert other units of
model. An unbeatable value! 100-
transmitter. Controls include on
switch/volume control, push-to-
switch, call signal switch. 6 transis
Ten-section 44" telescoping ante
really gets your signal out. High-
pact case, 6x2½x1½". No license
age limit. With Channel 11 cryst
9-volt battery, carrying strap. F
Japan. Shpg. wt., 1 lb.
17 A 9815 S. ....

3-channel 100-mW with separate mike and speaker

With IC's and Call Signal

29^{95}

Integrated circuit IF to give you maximum performance

Fanon IC-10. Up to 3-channel crystal-controlled transmit and receive. Solid-state circuit. Built-in Call Signal to alert other units of this model. Separate mike and speaker; squelch control for quiet standby operation; battery life meter; earphone and external power jacks. 10½x2¾x1⅝". With hand strap, shoulder strap, earphone. Ch. 9 crystals. Japan. Order 8 "AA" batteries or rechargeable pack.
17 A 9786 S. Shpg. wt., 2 lbs. . . . **29.95**

With Call Signal and tuned RF

29^{95}

Call Signal alerts other units of this model

Midland 13-124C. Features three crystal-controlled channels and Call Signal. Also, separate speaker and push-to-talk mike for improved modulation. Sensitive superhet receiver has tuned RF stage, fully variable squelch. Input jacks for AC adapter, battery charger, earphone. Metal case, 7½x2¾x2⅛". With leather carrying case, Channel 11 crystals, battery holder. Order eight "AA" batteries below. Japan.
17 A 9810 S. Shpg. wt., 1½ lbs. **29.95**

WALKIE-TALKIE ACCESSORIES

17 A 9767 S. 9-VAC Adapter. 12 oz. 4.95
17 A 9640. 12-VAC Adapter. 12 oz. 4.95
18 A 5980. 9-V Battery. 4 oz. . . . . 2/59¢
18 A 5083. "AA" Battery. 4 oz. . . 2/27¢
17 A 9820. Ni. Cad. Pack and Charger (for IC-10 only). 11 oz. 22.25

No license needed for 100-mW units . Extra crystals sold on page 2

Fanon solid-state wireless Intercoms

tra-powerful 2-channel com System . . 1-watt output

2-station System 66^{50}

res two separate talk channels mit simultaneous conversations

F1W-2. Pushbutton system has output for full volume, clear No wires needed, just plug into AC. Two pair can carry on neous conversations without ring with each other. Volume, sten, squelch controls. Two-tone ½x4x3". Wt., 5 lbs.
34 X. 66.50
35 X. Extra Station, 2½ lbs.34.65

Lowest priced wireless System . . ideal for homes

2-station System 24^{95}

Operates room-to-room or between buildings on same power line

Model EW3A. No installation, just plug units into 110 VAC outlets and start talking. Ideal "babysitter." Quieting circuit cuts noise. Each unit has press-to-talk bar with lock position for monitoring; on/off switch and volume control. High-impact beige styrene case, 3½x4½x2". Japan. Shpg. wt., 1½ lbs.
12 A 8211. .24.95

Thrifty-priced 2-channel System for home or office

2-station System 33^{95}

Two separate talk channels with quieting circuit to cut noise

Model 1642. Two separate talk channels. No installation—just plug into 110 VAC outlets and talk. Operates room-to-room or between buildings on same line. Units have pilot lights, on/off volume control, talk/listen switch. Beige/Brown. 5x4¼x1¾". From Japan. Shpg. wt., 3 lbs.
12 A 8212. . . . . .33.95
12 A 8286 X. Extra Station, 1 lb. . .17.95

uTone "Commu-Ni-Com" wire-type 4-station Intercom/Door-Answering System

69^{49} System

Solid-state system features talk/listen switch and monitor position on indoor stations. Any station can talk to any other station. Easy wall surface mounting or flush mounting with "A" Frame below. Includes Central Amplifier, plus 3 Indoor Stations; Door Station; 16-volt Step-Down Transformer; 50-ft. Cable. For 110-120 volts, 60 Hz AC.
12 A 8177 X. Shpg. wt., 10½ lbs. 69.49
12 A 8186. Extra 472B Indoor Station. 6¾x4⅞x1⅞". 1½ lbs. 8.24
12 A 8187. Extra 471 Door Station. 4⅝x3¾x1⅝". 1½ lbs. . . .7.24

12 A 8195. Electric Door Chime. Model L-74 (Not illustrated). For use with above. 7⅝x8x2½". Shpg. wt., 3¾ lbs. 14.49
12 A 8185. 250′ 8-Conductor Cable. Wt., 8 lbs. 17.95
12 A 8191. Type 472-A "A" Frame. 6½x4⅝". Wt., 6 oz. . . . . . .94¢

Low as 46^{00} Per Master

lk-A-Phone solid-state all-master Intercoms

station can originate a call. Separate conversa- can be handled simultaneously. With press-to- ar, volume control. Finished in leather-like gray and chrome. 3⅛x10½x8¾". For 110-120 volts, Hz AC, or DC. U.L. Listed.

K-LS-5. For up to 5 stations. Uses Type 5506 luctor cable, see page 378.
079 X. Shpg. wt., 7 lbs. .46.00

K-LS-10. For up to 10 stations. Uses Type 9911 nductor cable, see page 378.
084 X. Shpg. wt., 7 lbs. .56.40

Entire Talk-A-Phone Line Available from Allied

K-LR-3

Low as 46^{00} Per Master

K-LR-3R

Talk-A-Phone solid-state Master-Substations

Substations can call Master, but not each other. Master has press-to-talk, volume. U.L. List. 120 VAC.
K-ML-5 Master. For up to 5 Subs. Shpg. wt., 7 lbs.
12 A 8085 X. Size, 10½x8¾x3⅛". . . . . .Each 46.00
K-ML-10 Master. For up to 10 Subs. Shpg. wt., 7 lbs.
12 A 8086 X. Size, 10½x8¾x3⅛". . . . . .Each 56.40
K-LR-3. Substation. Deluxe finish front. Wt., 4½ lbs.
12 A 8088 X. Size, 7½x8¾x2⅞". . . . . .Each 20.40
12 A 8089. K-LR-3R Substation. Above, but for flush wall mtg. Size, 4$\frac{3}{16}$x7$\frac{3}{16}$". Wall opening, 4⅛x6½x2" deep. Gray, chrome. Shpg. wt., 4 lbs. . . . . .Each 15.80

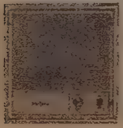
12 A 8090. K-LR-3M. Substation. Same as K-LR-3R, but grain, baked enamel. Shpg. wt., 4½ lbs. . . . .Each 15.80

Master Station 126^{95}

Nutone Master Station FM-AM/Intercom

Model 2090. Master Station accepts up to 8 Remote Stations. Offers hi-fi FM, AM, plus intercom. Boasts "All-Call" talk/listen lever for paging through all Remote Stations; slide-rule dial; AFC on FM. Walnut finish. 8¾x16x1¾" (projects 1⅝" from wall). 115 VAC, 60-Hz transformer. Remote stations, 3-cond. cable below.

12 A 7991 X. Shpg. wt., 9½ lbs. 126.95
12 A 7990 X. Model 2091. White, beige. 9½ lbs. 126.95



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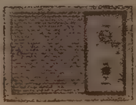


B

C

Remote-Stations and Cable for 2090 and 2091

A **12 A 7992 X. N2021 Indoor Remote Station.** 8" speaker, volume, talk/listen controls, detachable control panel. 12x12x2⅞". Eggshell white finish. 3¾ lbs. 16.95
12 A 8042. 2411 A "A" Frame. 12½x11". Wt., 1¾ lbs. . . 1.95
B **12 A 8033. N2027 Indoor Remote Station.** 5" speaker, volume, talk/listen controls. Egg shell white. With rough-in frame, 5¼x8⅛x¾". 1½ lbs. 7.95
C **12 A 8193. 412 Door Remote Station.** 3" speaker, talk/listen switch. 3¾x4⅝". Surface mounting. Projects 1⅝" from wall. Gold finish. 1½ lbs. 11.49
12 A 8039. 200' Roll 3-Cond. Cable. 2¾ lbs. 5.95
12 A 8040 X. 1000' Roll 3-Cond. Cable. 13 lbs. 21.95

99^{95}

Nutone 5-station AM Radio/Intercom

Delivers AM radio programs to any room desired. Consists of: Model 2034 Master Station; 3 Model 2028 Indoor Remote Stations with Frames; Model N2006 Door Remote Stations; 200' 3-Cond. Cable. Inside Remote Stations have "latching" talk/listen switch for continuous monitoring. Master Station has jack for record changer; intercom override and independent "on-off" pilot lights. "All-Call" lever permits paging through all Remote Stations—persons can answer without using controls. Door-switch permits answering door from any station, Remote or Master. Beige finish Master Station, 8¾x16x1¾", projects 1⅝" from wall. White inside Remote Station, 6⅜x8½x2⅝", projects ½". Gold finish door Remote Station, 5⅞x4⅜x1¾", projects only ¼" from wall. With 115-volt AC transformer. Shpg. wt., 14 lbs.

12 A 7993 X. 99.95
12 A 7994 X. Extra 2028 Indoor Remote Station. 1½ lbs. 7.69

Solid-state Radio-Intercoms deliver music to any room

Nutone deluxe FM-AM/Intercom

Master Station 154^{95}

D FM-AM Master Station

Model N2561. For room-to-room intercom, door answering from any Remote-Station, plus FM-AM. Turn radio off at any Remote Station, still send and receive calls. Intercom mutes radio. Accepts up to 16 Remote Stations. 6x9" speaker, AFC. Antenna, transformers, rough-in frame, 7⅜x14¼x1¾", hardware. Walnut with silver trim. 17⅜x9⅝", projects 2" from wall. 115 VAC.

12 A 8180 X. Shpg. wt., 14¼ lbs. 154.95
12 A 8181 X. Model N2562. Above, copper finish . . 154.95

Remote Stations and Cable for above

E **12 A 7996 X. N2572 Hi-Fi Indoor Remote Station.** 8" speaker. Volume/function controls, 2 talk/listen levers, 12x12x2⅞". Projects ½". White. 5¼ lbs. 22.95
F **12 A 7997 X. N2570 Indoor Remote Station.** Above 5" speaker. 6½x9¼x1½". Projects ⅞". 2½ lbs. 14.95
G **12 A 8183. 2571 Door Remote Station.** 6⅛x4⅝". Black/gold. Frame, 5⅞x3⅝x1¾". 1½ lbs. . . 10.49
12 A 8083. 50' Roll 8-Cond. Cable. Wt., 2 lbs. 5.24
12 A 8185. 250' Roll 8-Cond. Cable. Wt., 8 lbs. 17.95

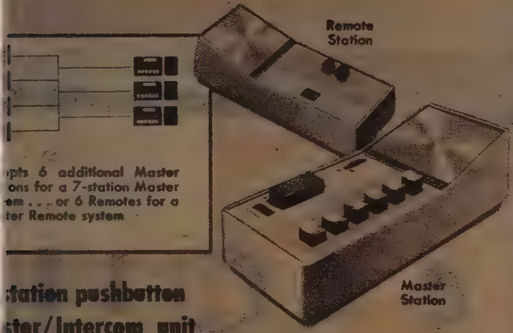
Five-Station System 99^{95}

Emerson FM-AM Radio/Intercom System

Model RM-16. Complete 5-station FM-AM system deliver FM-AM radio to any desired room, plus intercom convenience between stations. Includes: FM-AM Master Station; 3 Indoor Remote Stations; Door Remote Station 165' 3-Wire Interconnecting Cable. Master Station ha talk/listen switch, system volume control; AM-Off-FM switch; vernier tuning dial. Remote Stations have talk listen switch; volume control with "off" position. Weatherproof door station lets you identify callers from any room i the house. Solid-state; tuned RF stage for excellent FM reception. Radio is automatically silenced when intercom is used. Units flush-mount in walls 2 or more inches thick Master Station, 14½x5"; Indoor Remote Stations; 7¾ 4½"; Door Station, 3⅜x5⅜". Master, off-white, gold trim Remotes, off-white. Door station gold-anodized aluminum With transformer, 4 plaster mtg. rings. 115 VAC.

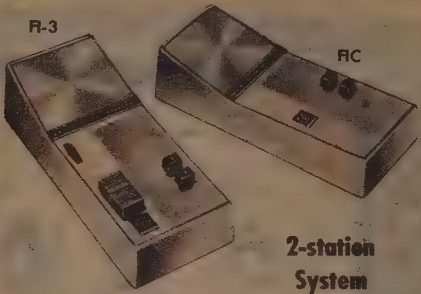
12 A 8099 X. Wt., 14 lbs. 99.9

Fanon deluxe solid-state Intercoms



tation pushbutton ster/Intercom unit

-7. Features solid-state circuit; full one-watt power out-
ume control; talk/listen switch. Connects to any PA sys-
paging and hands-free reply. When used in all-Master
all units can call one or more Masters; up to three
eous conversations. Stations can be used up to 500 feet
ligh impact styrene case, 9½x4x3¼". Gray/charcoal fin-
uires cable with one more conductor than No. of stations.
VAC.
2 X. Shpg. wt., 3 lbs. . . . . **Each 34.65**
3 X. **Model FI-13 Master Unit.** As above, with 13 stations,
ing buttons for PR-15 or FIR. 4 lbs. . . . . **Each 47.75**
8 X. **Model FIR Remote Station.** For above models. Shpg.
s. . . . . **Each 11.25**
9 X. **Model PR-15 Paging/Talkback Relay.** Links FI-7,
o PA systems for paging/talkback. Add one shielded
each PR-15. Shpg. wt., 1 lb. . . . . **Each 22.25**



2-station System

12 A 8231 X. Model FIC-3 Indoor System. FI-3 Master Sta., FIC Rem. Sta. 50′ 3-cond. cable. Master has 2 selector buttons. Remote, "beep," privacy buttons. Size, 9½x4x3¼". 115 VAC. Shpg. wt., 5 lbs. 38.50

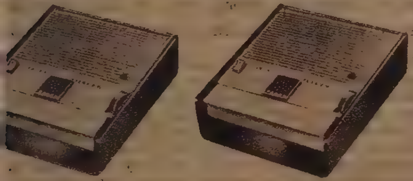
12 A 8237 X. FIC Indoor Rem. Sta. 2 lbs. Ea. 12.25

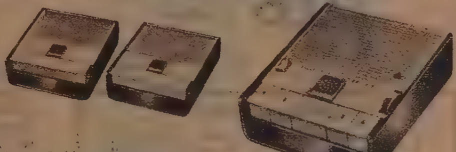
12 A 8238 X. FID Outdoor Rem. Sta. 2 lbs. Ea. 8.55

12 A 8236 X. FIS Staff Sta. Rem. or Master Sta. with above. Less cable. 2½ lbs. . . . . . **Each 30.85**

12 A 8208 X. WC-1 Walnut Cabinet. For all "FI" units. Hand-rubbed finish. 1 lb. . . . . **Each 6.15**

CABLE REQUIREMENTS: FI-13, FI-7, or FI-3 systems require cable having one more conductor than number of stations. Ex.: 13 station system uses 14-conductor cable. For paging, use two more wires than number of stations, plus one shielded cable for each PR-15 paging relay used. Cable, page 374.





Add Up to 2 More Remotes, Indoor or Outdoor

Popular two-station Intercom System

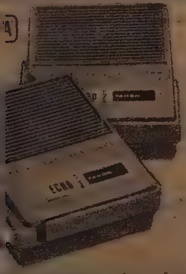
1600. Features push-pull amplifier for fine sound
y. Master Station has press-to-talk bar with lock
nds-free conversations, on-off switch, volume con-
Remote Station can "beep" Master even when sys-
s "off." Accepts one additional indoor or outdoor
te Station. With 50′cable. 1¾x4¼x5". 110-130 VAC.
3213 X. Japan. Shpg. wt., 3 lbs. 21.75

"Starter Set" three-station Intercom System

Model 16SY. Versatile system features Model 1605 Master Station; two Model 162 Indoor Remote Stations; two lengths 50′ cable; plug terminals. Master unit accepts up to 4 remote Stations, indoor or outdoor. Calls any room desired or all together. Remotes have "beep call" signal. Each station 1¾x4¼x5". 110-130 VAC.
12 A 8215 X. Shpg. wt., 3½ lbs. 33.75

ACCESSORIES FOR 1600, 16SY

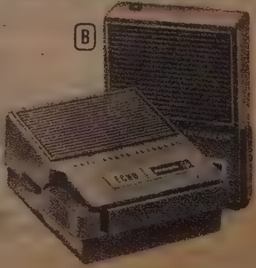
3218. **Model 162 Indoor Remote Sta.** 1½ lbs. **Ea. 5.95**
3221. **Model 161 Outdoor Remote Sta.** 1 lb. **Ea. 5.95**
12 A 8222 X. 50′ Cable. Plug-in connectors. ½ lb. 2.25
12 A 8223 X. 100′ Cable. Plug-in connectors. 1 lb. . . . 3.75

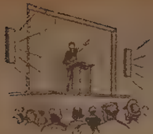


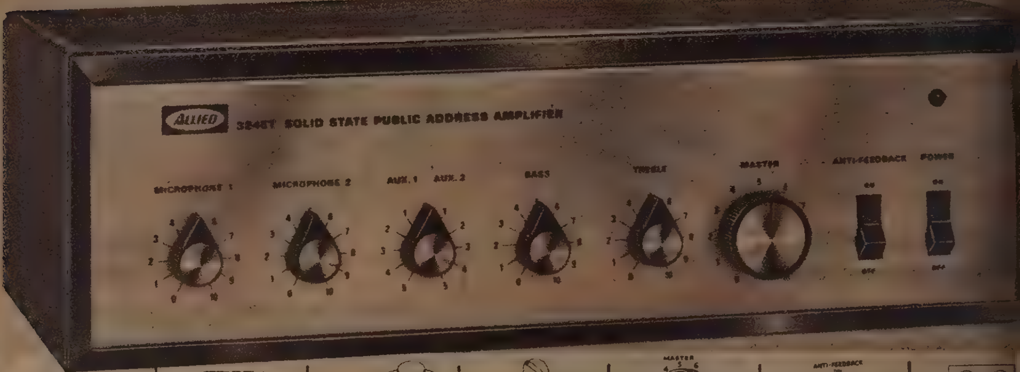
Low-cost two-station Intercom System

A **"Echo 2A" Battery-Operated System.** Great for outdoors and campers. Features sensitive push-pull amplifier; 2½" speakers. "Beep" button allows signalling even with Master Station "off." Master Station has press-to-talk contour switch, volume control. Requires one 9-volt battery, order below. With 50′ cable. Each unit, 2x3x4". Japan. Shpg. wt., 1½ lbs.
12 A 8219 . . . . 9.95
18 A 5650. 9-Volt Battery. Shpg. wt., 4 oz. . . . . **Each 48¢**

B **"Echo 3A" AC Operated System.** Same features as above, but system operates from external 117 VAC power supply. For home, office, etc. With 50′ cable. Japan. 1½ lbs.
12 A 8220 . . . . 14.50







Hi/lo impedance mike switch

AC convenience outlet on back panel

All solid-state circuit

Mike precedence feature

Extra-large master gain control

ANTI-FEEDBACK
ON
OFF
Anti-feedback switch

Two speake outlet jack

Allied® 45-watt solid-state PA Amplifier

7995 $5 monthly

see page 438

- All silicon solid-state circuit delivers full power instantly
- Two auxiliary inputs for phono, tuner, or tape recorder
- For constant-voltage or standard impedance installations

Model 3246T. Meets the needs of any moderate-size PA application. Performs superbly both indoors and out. Provides plenty of power for halls, churches, school auditoriums, theaters, and skating rinks. Handles outdoor lectures, stage performances, or loading platforms with ease. Advanced silicon solid-state circuit assures reliability and gives you full 45-watt power instantly—no tubes to burn out or replace. Mike precedence feature permits priority over regular porgrams. AC convenience outlet on rear of chassis. Low-frequency filter may be switched in to cut feedback and protect speakers from overload.

Mike inputs switch-controlled for high or low impedance. Two auxiliary inputs for distributing music from a phono, tuner or tape recorder. Can be used in either constant-voltage or standard impedance installations. Separate, calibrated bass and treble controls. Gain controls for mike and auxiliary inputs, plus extra-large master gain control. Has both screw type and quick-disconnect speaker connections. 5$\frac{3}{16}$x15$\frac{1}{4}$x9$\frac{1}{2}$". Handsomely styled in gray case with brushed aluminum front. For 105-130 V, 50-60 Hz AC.

12 A 7042 U. Shpg. wt., 10 lbs. 79.9

SPECIFICATIONS

Power Output: 45 watts (90 watts peak). *Response:* 40-10,000 Hz. *Inputs:* 2 Mic; 2 Aux. (crystal or ceramic phono cartridge, tuner, tape recorder). *Controls:* Mic (2); Aux.; Bass; Treble; Master Gain; Anti-Feedback; On-Off. *Outputs:* 4 and 8 ohms, plus 25 and 70.7 V; AC Convenience Outlet. *Semiconductors:* 8 silicon transistors; 3 diodes. *Power Consumption:* 65 watts at 120 VAC.

INSTALLATION NOTES

Mike Connector: Amphenol 75MC1F or Switchcraft 2501F (takes 2, 1 supplied). *Aux. Conn.:* Phono plug (takes 2, 1 supplied). *Speaker Conn.:* Screw terminals; spkr. jacks, use Amph. 91MPM3S plugs, not supplied. *Speaker Cable:* Use 2-cond. (not included). *Line Cord:* 7' 2-wire with plug. *Ventilation, Mike Plug Space Required Behind Cabinet:* 3". *Ventilation Space Required Above Cabinet:* 5". *Power:* 105-130 V, 50-60 Hz AC; optional Phono Top for 60 Hz AC.

SPECIAL PA SYSTEM PRICES

Choose one of the PA Systems in this catalog or write for a special System Price on components of your own choice

ACCESSORIES FOR ALLIED PA SYSTEMS

A

C

B

A **Carrying Case.** For amplifiers up to 17x11$\frac{1}{4}$x7", plus two 12" speakers. Size, 21$\frac{1}{2}$x17$\frac{1}{2}$x12".

12 A 7978 U. Shpg. wt., 19 lbs. 21.9

12 A 0027 D3U. **Carrying Case with Speakers.** Wt., 29 lbs. 31.9

B **Speaker Cable.** Two-conductor POSJ cord, nominal #20. Stripped and tinned. In 50-ft. roll.

12 A 7982. Shpg. wt., 8 oz. .... Roll 1.7

C **Allied 3201A. Four-Speed Manual Phono.** Mounts atop Allied 3246T 3281T. With cartridge. For 110 V, 60 Hz AC.

12 A 7983 X. Shpg. wt., 6 lbs. 24.9

SHIPPING NOTE: Items with suffix U, W or Z in stock no. sent or express. See Ordering Information page

Allied money-saving 45-watt PA Systems

Save up to $43.56 on the PA System you want with Allied's low system prices

A Indoor sound-column System

ly, $177.96. For medium-size ıurches, theaters, lecture rooms, :ludes: Allied 3246T Amplifier; 311 Mike; Atlas MS10C Stand; lied 3300 Sound Columns. Each 41x11x6". Order cable below.
21 L5Z. Wt., 96 lbs........159.95
'82. Speaker Cable. 2-cond. 50-ft. ɔg. wt., 8 oz.............Roll 1.79

Save $18.01

159⁹⁵

3] Deluxe indoor sound-column System

ly, $227.61. Fine system for larger s and auditoriums. Includes: 246T Amplifier; Electro-Voice 664 l Mike; Atlas MS10C Stand; Two SD1064 Sound Columns. Each 30¼x7x3⅛". Order speaker ove. Shpg. wt., 62 lbs.
11 L5X...................199.95

Save $27.66

199⁹⁵

r best 45-watt indoor sound-column System

ly, $343.51. Large system for cov- eaters, skating rinks, gyms, large ums. Includes: Allied 3246T er; Two Electro-Voice 664 Cardi- ces; Two Atlas MS10C Stands; lied 3300 Sound Columns. Each 41x11x6". Order cable above.
36 L8Z. Shpg. wt., 184 lbs..299.95

Save $43.56

299⁹⁵

Compact easy-to-carry portable System

ly, $131.25. Packs into speaker easy portability. Ideal for halls, outdoor lectures, loading plat- Includes: Allied 3246T Amplifier; 4525S Microphone with switch; " Wide-Range Speakers; Portable g Case. Order cable above.
15 L5U. Shpg. wt., 39 lbs...119.95

Save $11.30

119⁹⁵

llied 20-watt PA Amplifier features silicon solid-state circuit for high reliability

- ledium -size area coverage
- xcellent sound quality
- Outputs for all type systems

59⁹⁵

3221T. Excellent PA amplifier choice for use clear, medium-size area coverage is required st cost. Ideal for small halls or lecture rooms. le silicon solid-state circuit gives you full power , instantly, every time you need it. Inverse ck reduces hum and distortion. Fine for both nd music in standard impedance or constant- installations. AC convenience outlet on back sis. Use with hi or lo Z mikes. Gray metal case, d aluminum front, 4½x13x7⅝".
941 U. Shpg. wt., 8 lbs.....................59.95

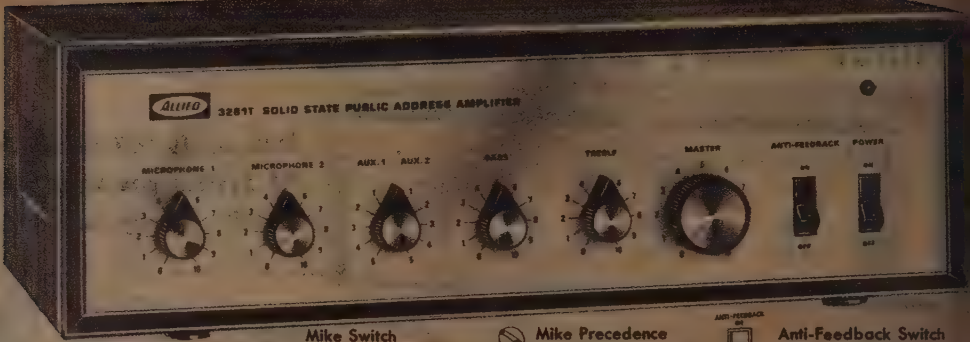
SPECIFICATIONS

Power Output: 20 watts (40 watts peak). *Response*: 40-10,000 Hz. *Inputs;* 1 Mic, 2 Aux. *Controls:* Mic and Aux faders; Master tone; on-off switch. *Gain:* Mic, 126 dB; Aux, 83 dB. *Outputs:* 4, 8, 16 ohms; 25, 70.7 V. *Semiconductors:* 6 transistors; 2 diodes.

INSTALLATION NOTES

Connectors; Mic, Amphenol 75MC1F (one supplied); Aux, pin plug (takes 2, 1 supplied). *Speakers:* Screw terminals; speaker jacks, use Amphenol 91MPM3S plugs, (not supplied). *Space Required:* 3" behind, 5" above. *Power Requirements:* 105-130 V, 50-60 Hz AC.

age 438 for how to buy your PA system with no money down



Two Speaker output jacks

Mike Switch for high or low impedance

Mike Precedence feature for paging use

Anti-Feedback Switch prevents howl, protects speakers

Allied solid-state 80-watt PA amplifier . . our most powerful model

114.95 $6 monthly

see page 438

- All silicon transistors for highest reliability and stability
- Anti-feedback control allows higher volume without feedback
- "Quick-set" selector for instant choice of desired impedance

SPECIFICATIONS

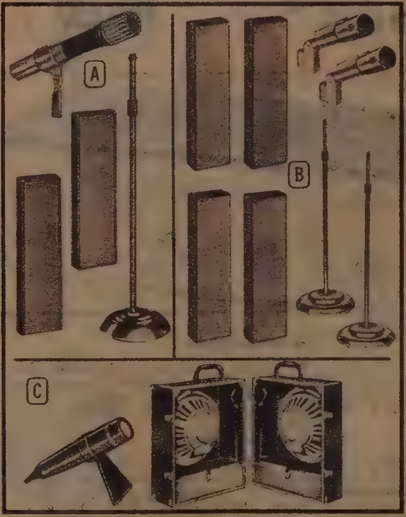
Power Output: 80 watts. *Response:* 40-10,000 Hz. *Inputs:* 2 Mic, hi or low impedance (switch controled); 2 Aux (ceramic or crystal phono, tuner, or tape). *Gain:* Mic, 118 dB; Aux, 89 dB. *Hum and Noise:* Mic, 43 dB below rated output; Aux, 66 dB below rated output. *Outputs:* 4, 8, 16 ohms; 25 and 70.7 V.

INSTALLATION NOTES

Mike Connectors: Amphenol 75MC1F or Switchcraft 2501F (takes 2, 1 supplied). *Aux Connectors:* Pin plug (takes 2, 1 supplied). *Speaker Connectors:* 2 screw terminals. *Speaker Jacks:* use Amphenol 91 MPM3S. *Line Cord:* 7-ft., 2-wire. *Space Required Behind Cabinet:* 3". *Vent Space Above Cabinet:* 5". *Power Consumption:* 150 watts.

Model 3281T. It takes plenty of power to do the really big jobs. That' why this all-silicon-transistor amplifier was designed to deliver a full 8 watts of audio output, instantly, every time you need it. There are n tubes to fail. You can rely on it for excellent coverage of large audito iums or working areas. Yet it's priced surprisingly low. Dollar for dolla you just can't get more in an 80-watt amplifier. Designed to maintai its wide response even at full power, it delivers better sound over wid areas. Efficient solid-state circuit draws minimum current for econom cal operation.

Features separate bass and treble controls, plus a large master gai control. Separate mixer controls and inputs for 2 mikes. Common mixe control for auxiliary inputs accommodates phono, tuner or recorde Anti-feedback circuit with front panel switch diminishes the lowe frequencies to allow higher volume without feedback. "Quick-Set selector for choice of impedance—4, 8, 16 ohm and 70.7-V output plus 25-V output that permits installation of constant voltage syste without conduit for speaker wires. Pilot light. Gray metal case, brushe aluminum panel. 5 3/16x15 1/4x11 1/2". For 105-130 V, 50-60 Hz AC.
12 A 7040 U. Shpg. wt., 27 lbs. 114.9



Save up to $78.56 on powerful 80-watt solid-state Public Address Systems

Save $26.01

186.95

A Quality indoor sound-column System

Separately, $212.96. Allied 3281T Amplifie Allied 3311 Mike; Atlas MS10C Stand; Two Allie 3300 Sound-Columns. Columns, 41x11x6". Orde speaker cable below.
12 A 0025 L5Z. Shpg. wt., 106 lbs. 186.9

Save $78.56

419.95

B Deluxe four sound-column System

Separately, $498.51. Allied 3281T Amplifier; Tw Electro-Voice 664 Mikes; Two Atlas MS10 Stands; Four Allied 3350 Sound-Columns. Co umns, 41x11x6". Order speaker cable below.
12 A 0038 L4U. Shpg. wt., 219 lbs. 419.9

Save $13.84

154.95

C Portable indoor/outdoor System

Separately, $168.79. Packs into single carryin case. Allied 3281T Amplifier; Allied 4525S Mike Two 12" Wide-Range Speakers; Portable Carryin Case. Order speaker cable below.
12 A 0026 L5Z. Shpg. wt., 46 lbs. 154.9
12 A 7982. Speaker Cable. 2-conductor. 50-ft. roll Shpg. wt., 8 oz. . . . . Per roll 1.7

SHIPPING NOTE: Items with suffix U, W or Z in stock no. are truck or express. See Ordering Information pa

Solid-state PA Amplifiers and Systems

IVERSITY "Power-Line" Accessories

del PT-210 Phono Top. Three-speed monophonic
no player for top-mounting onto the Power-Line
ier. Has dual stylus (stereo microgroove, 78 rpm)
er sapphire cartridge for playing any stereo or
record. 4¾x14⅜x8¾". 117 VAC.
988 X. Shpg. wt., 6 lbs. **32.97**

del UPB-100T 100-Watt Booster Amplifier. Boasts
d-state circuit for dependable operation. Ideal
e wherever undistorted high power is required.
n feedback suppression circuitry with high-fidel-
ponse characteristics. Master gain control; on-off
. Computer type logic circuits assure maximum
tion. Thermal protection. Response: ±1½ dB,
00 Hz. Inputs: lo Z transformer; hi Z 50,000
Outputs: 25, 70 V isolated line; 4 ohms with
erminals. 5x15½x10½". 117 VAC.
139 U. Shpg. wt., 18 lbs. **254.95**

del UMX5 Solid-State Mixer Preamp. All silicon
sistors. Five channels: 4 mike (hi or lo Z with
l transformer), 1 combination lo Z (transformer)
aux. Master gain control, on-off switch with
n-off audio switch for each input. Connectors
alleling up to 3 units. Response: ±2 dB, 25-
Hz. 13½x2½x4⅝". 120 VAC.
40 U. Shpg. wt., 6 lbs. **129.95**

del MPA-1 Two-Channel Mike Preamp. Adds 2 addi-
al mike inputs to UPL amplifier. Has full level
s, hi-lo impedance switch, facilities for remote
ecedence controls. 3x4x1½". 117 VAC.
41 X. Shpg. wt., 1 lb **41.97**

University Power-Line 100-watt solid-state PA Amplifier with true hi-fi performance

Direct-coupled solid-state circuit eliminates transformer with 4 to 20-ohm loads

159.00 **$8 monthly***

Model UPL-100T. Professional, high-fidelity sound at moderate cost. All-silicon-transistor circuits eliminate need for Constant-Voltage systems in virtually all small to moderate-sized installations, but has output autoformer for Constant-Voltage output use when required. Direct-coupled circuits, from input to speaker, end insertion losses and give you a 20 to 25% increase in available power at the speakers. Controls, mixes and amplifies 3 or more input signals.

Features computer logic circuit for overload protection. Separate bass, treble, and master gain controls. Pilot light. Has hi or lo Z input selection; switched AC outet; speaker protection circuit; fused AC line. *Response:* 40-20,000 Hz. *Outputs:* 25 and isolated 70.7 V line; 4, 8 16 ohms. *Inputs:* 2 mike, hi or lo Z unbalanced, aux, bridging hi Z. For 117 VAC.

12 A 7984 U. Shpg. wt., 22 lbs. **159.00**

12 A 7985 U. Model UPL-60T. As above, but 60 watts. Shpg. wt., 20 lbs. **129.00**

12 A 7986 U. Model UPL-35T. As above, but 35 watts. No logic circuit. Response, 50-15,000 Hz. Wt., 17 lbs. **104.97**

12 A 7987 U. Model UPL-20T. As above, but 20 watts. No logic circuit. Response, 50-15,000 Hz. One mike input, not 2. Shpg. wt., 17 lbs. **92.37**

id-state 35-watt Paging System

tely, $170.15. Includes Ampli-Vox S-402
t Amplifier; Two Electro-Voice PA-30A
Horns; E-V 600E Push-to-Talk Mike.
ier has separate controls to allow back-
music while paging. Mike, aux inputs.
ance: 4, 8, 16 ohms; 25, 70.7 V. 8⅜x3¼x
or 110 VAC/12 VDC. Order cable below.
37 L4X. Paging System. Wt., 15 lbs. **149.95**
156 X. Amplifier Alone. 8¾ lbs. **99.95**
82. Speaker Cable. 2-conductor. 50-ft. roll.
wt., 8 oz. . . . . **Per roll 1.79**

Save $20.20

Amplifier Alone 99.95 **Complete System 149.95**

-state 16-watt Mobile PA System

tely, $61.99. Includes: Midland Amplifier,
niversity DLC-8 Speakers, Electro-Voice
sh-to-Talk Mike with 5-ft. cord, bracket.
ier is ideal for any mobile PA use. *Re-*
40-16,000 Hz. *Inputs:* 600 ohms mike;
pedance mike/tape. *Outputs:* 8, 16 ohms.
VDC, neg. or pos. gnd. With mounting
ts, plug, spare pilot lamp, fuse, lead wires.
x5⅞". Amplifier fron Japan
035 L4X. Mobile PA System. 13 lbs. . . . **56.95**
375 X. PA Amplifier Alone. 2 lbs. **29.95**

Save $5.04

Amplifier Alone 29.95 **Complete System 56.95**

Bogen Public Address Equipment

Challenger series CHS solid-state PA Amplifiers

Model CHS100. Powerful 100-watt all silicon-transistor amplifier featuring 2 high or low-impedance mike inputs with faders; auxiliary and bridging inputs. Master volume; bass, treble controls. Protection against damage from accidental shorting or disconnecting of speaker lines. Remote volume control circuit. "Memory markers" for easy resetting of controls. Provision for microphone precedence. Frequency response: ±2 dB, 40-20,000 Hz. Impedance: 2, 8 and 16 ohms; 25 and 70-volt balanced lines. 5½x10½x15¼". For 105-125 V, 50-60 Hz AC. Shpg. wt., 24 lbs.
12 A 7311 U................157.15

Model CHS50. As above, but 50-watt power. 4-ohm instead of 2-ohm output impedance.
12 A 7312 X. 21 lbs...........127.45

Model CHS35. Same as CHS50, but 35 watts. Non-silicon output stage. Provision for 12 VDC operation.
12 A 7313 X. 17 lbs..........104.95

Model PMA-2 Preamplifier. Mounts into front panel of CHS amplifiers to give 2 more hi or lo-Z mike inputs, controls. 1⅝x4¾x3⅝".
12 A 8262. 3 lbs..............32.95

Challenger tube Amplifiers —fine quality, lower cost

Model CHB100. Tube equivalent of CHS100 described at left. 100-watt amplifier has 2 high impedance mike inputs (no low-impedance) with separate controls, 2 auxiliary inputs with fader, and magnetic phono input. Master volume, bass and treble controls. "Memory markers" for resetting controls. Protected against damage by shorting of speaker lines. High input sensitivity, with low hum and noise (−70 dB mike, −80 dB aux.). Reserve power for volume peaks.

Response: ±2 dB, 40-20,000 Hz. Impedance: 4, 8, 16 ohms; 25 and 70-volt balanced lines. 6¾x15¾x10". For 105-125 volts, 50-60 Hz AC. Optional phono-top below.
12 A 7348 U. 25 lbs............133.50

Model CHB50. Same as CHB100 amplifier above, but 50 watts power.
12 A 7347 U. 22 lbs............103.50

Model CHB35A. Same as CHB100 amplifier above, but 35 watts power.
12 A 7346 U. 20 lbs..............85.50

LPC4 4-Speed Phono-Top for Bogen PA Amplifiers. With cartridge, mounting brackets. Size, 5x13x9½". For 117 V, 60 Hz AC.
12 A 7373 X. 7 lbs............27.75

A 60-watt PA Amplifier with five mike inputs

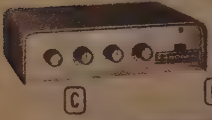
Model MX60A. Five mike inputs convert to lo-Z with T200 tran former, below; one to magne phono/tape head) plus 2 auxilia inputs. Mix, fade 6 inputs. Mast gain; bass, treble controls. Le markers. ±1½ dB, 10-38,000 H Distortion: under 2% at 60 wat Outputs: 4, 8, 16 ohms; balanc 25 and 70 V (83 ohms) line. 4 16½x12". For 117 VAC.
12 A 7379 U. Wt., 37 lbs....229.

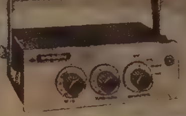
MX30A 30-watt Amplifier. Abo but 163-ohm output instead of
12 A 7380 U. Wt., 34 lbs....1‌7.

B 60-watt PA Amplifier with three mike inputs

Model M60A. Three mike inpu (1 converts to phono), plus aux iary. Master gain control; separa bass and treble controls. Le markers. Frequency response: dB, 20-20,000 Hz. Output: 4, 8, ohms; balanced 25, 70 V (83 ohm line. Less than 2% distortion at watts. 5¾x14⅞x9⅞". 105-125 50-60 Hz AC.
12 A 7369 U. Wt., 29 lbs....165

M330A 30-watt Amplifier. Abo but 163-ohm output instead of
12 A 7382 U. Wt., 20 lbs....126.





40-watt Mobile Amplifier

Model BT35A. Solid-state. One mike, 2 auxiliary inputs. Under 10% distortion at 40 watts. ±3 dB, 150-15,000 Hz. Impedance: 4, 8, 16 ohms. 3x8x6¼". For 12 VDC.
12 A 7393 X. 8 lbs...........90.00

C **Model MX6AT solid-state Mixer-Preamp.** Adds extra mike channels to amplifier or tape recorder. 4 high or low impedance inputs; separate volume control. ±2 dB, 50-20,000 Hz. 9¼x6x2⅝". For 117 V, 50-60 Hz AC.
12 A 7349 X. Wt., 6 lbs..........48.75

D **Model MO100A 100-watt Booster-Amplifier.** Has 115-V industrial output. Provision for paralleling several amplifiers. Response: ±1 dB, 8-50,000 Hz. Distortion: under 2% at 100 watts. Impedance: 16 ohms; balanced 25, 70, 115-V line. Requires 2-V input. 6¾x8x13". 105-125 V, 50-60 Hz.
12 A 7316 U. Wt., 33 lbs.......159.00

E **Model MXM-A Mixer-Preamp.** 5 hi mike inputs (convert to 200 oh with T200 transformer; 1 converts magnetic phono/tape); 2 hi-Z au iliary inputs, 1 bridging. Level mete hi-Z output or 600-ohm with TL6 transformer; speech filters for ea channel; notch filters. ±1 dB, 1 38,000 Hz. 4¾x16½x12". 117 VAC
12 A 7310 U. Wt., 23 lbs........167.

Model T200 Mike Transformer. 2 ohm. For "M" series amplifiers on
12 A 7381. Wt., 2 lbs............12.

Model TL600 Line Transformer. Plug-i 500/600 ohm. For MXM-A, MO100
12 A 7367. Wt., 2 lbs............13.

195⁰⁵

20-watt Transcription Player

Model VP25A. One side of case is amplif /player; other side is 12" speaker with cable. Automatic cuing. Variable 29- rpm. 45-18,000 Hz. 20 watts. Inputs mike, phono. 15¼x16½x10¾". 115 VA
12 A 7322 U. Wt., 40 lbs............195.

VP50-ADS. 40 watts. Two 12" speaker 4, 8, 16 ohms; 25/70 V outputs. 7x15 16½"; speaker case, 16½x15¾x11
12 A 7378 L2Z. Wt., 60 lbs..........265.

Allied® dynamic Microphones and Outfits

ch
95

Pair in Case 33^{75}

ed general-purpose Mike

4525. Perfect for recording. ost, omnidirectional dynam- e may be hand-held or used and (included). Constructed i-impact Cycolac® chrome- ed housing. 70-12,000 Hz se; −63 dB output. High ance. 4¾x1" dia. With 12-ft. and molded phone plug.
162. Wt., 1 lb.........12.95

4525S. Similar to above, but s a convenient on-off switch. lb.
015..................13.95

$2.00 on a pair for stereo

4525P. *Sep., $35.75.* Pair of dynamic microphones with tands and cable. Carrying x10½x3". Wt., 3 lbs.
64..................33.75
63. Case Alone. 1 lb....9.85

Each 19^{95}

Pair in Case 49^{95}

Allied omnidirectional Mike

Model 3311. Handsomely styled and quality-constructed dynamic mike gives high performance. Comfortable hand-held design; may be used as desk mike with stand included. Excellent 45-15,000 Hz response. Impedance, 10,000 ohms. Output, −65 dB. On-off switch. 10⅛x1⅜" dia. Chrome/black zinc die-cast housing. With 5-ft. 1-cond. cable, phone plug, stand, mike holder, stand coupler, swivel mount. Japan.
12 A 7156. Wt., 1½ lbs......19.95

Save $2.90 on a pair for stereo

Model 3311P. *Sep., $52.85* Two 3311 mikes in form-fitted carrying case. Velvetine lined. Beige polystyrene. 13½x11¾x2½".
12 A 7155. Wt., 6 lbs........49.95
12 A 7157. Case Alone. 3 lbs..12.95

Each 24^{95}

Pair in Case 59^{95}

Allied cardioid dynamic Mike

Model 3310. Ideal for entertainers. Highly effective unidirectional cardioid pattern suppresses noises, reverberation, feedback. Hand-held, or can be mounted on standard ⅝"-27 stand, or used with desk stand (included). 40-16,000 Hz. Impedance, 10,000 ohms. Output, −63 dB. 7$\frac{27}{32}$x1$\frac{13}{16}$" dia. Satin-chrome housing. With 5-ft. 1-cond. cable, phone plug, stand coupler, swivel mount, desk stand. Japan. Shp. wt., 1½ lbs.
12 A 7159..................24.95

Save $2.90 on a pair for stereo

Model 3310P. *Sep., $62.85.* Two 3310 mikes in mar-resistant beige polystyrene case. Velvetine lined. Steel latch. 13½x11¾x2½".
12 A 7158. Wt., 6 lbs........59.95
12 A 7160. Case Alone. 3 lbs..12.95

A

B

C

D

E

F

rner hi-fi and communications Microphones

del 500-06 "Stereo Twins". Matched pair of broadcast- lity cardioid dynamic mikes. 40-15,000 Hz. 150 ohms/ −55 dB. Windscreen, switch, swivel mount. 20′ cable.
221. 6$\frac{13}{16}$x1$\frac{7}{32}$" dia. Shpg. wt., 6 lbs..........Pair 110.54
029. Single mike only. Shpg. wt., 3 lbs..............55.27

s 2" base CB Mike. Ceramic, with transistor preamp. -3500 Hz. 5000 ohms: −27 dB. 5′ coil cord, battery.
084. 7¾x3¾x5½". Shpg. wt., 3 lbs..............32.34
165. 254C. No preamp. 100-8000 Hz. −54 dB.....17.05

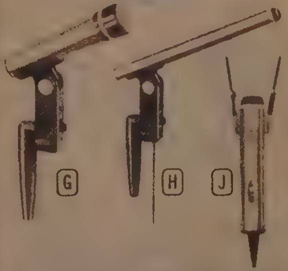
del 701 unidirectional Mike. Uniform response of 40-15,000 at maximum volume, with excellent feedback control. e blast filter, windscreen, switch. −55 dB.
224. 12′ cable, phone plug. Shpg. wt., 2 lbs.......36.50

del S2850 unidirectional Mike. 70-12,000 Hz response; dB F/B ratio. Hi-Z or 150 ohm; −64 dB. On-off switch.
229. Shpg. wt., ½ lb.........................23.76

+2U" mobile CB Mike. Same as "Plus 2," but mobile.
A 7032. 5′ cord, battery. Wt., 2 lbs...............23.23
034. "JM +2/U." Above, for electronic switching...23.23

s 350" mobile Mike. Transistorized dynamic mike for lacement of carbon communications mikes. Dark gray.
230. Shpg. wt., 3 lbs..........................20.58
288. 350C. Standard ceramic mike with hanger button, rackets. 80-7000 Hz. −54 dB. Wt., 1 lb...........8.95

Astatic dynamic Mikes

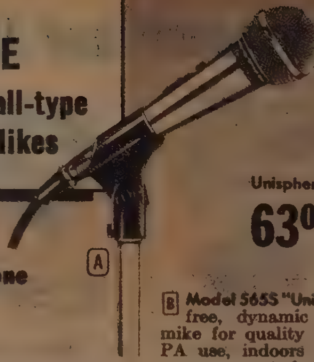


G Model 810S ultra-cardioid Mike. Positive anti-feedback with 25 dB front-to-back ratio. Wind filter, on-off switch. 40-15,000 Hz. Hi-Z/150 ohms. −50 dB hi-Z, −54 dB low-Z. 5$\frac{9}{16}$x1$\frac{5}{16}$" dia. 18-ft. cable.
12 A 7289. Wt., 3 lbs..........53.40

H Model 820S omnidirectional probe Mike. Balanced sound, indoors or out. 40-18,000 Hz. Hi-Z/150 ohms. −60 dB low-Z, −61 dB hi-Z. 9x¾". On-off switch, swivel adapter. 18′ shielded cable, conn.
12 A 7290. Wt., 2¾ lbs........51.00

J Model 840S lavalier Mike. Lapel clip, neck cord. 50-12,000 Hz as lavalier, 50-16,000 Hz hand-held. 150 ohms; −59 dB. Switch. 3¾x¾". 30-ft. shielded cable.
12 A 7291. Wt., 1 lb...........54.00

SHURE
Unisphere ball-type cardioid Mikes



"Unisphere B" dynamic Microphone

36.00

A Model 588SA "Unisphere B." Unidirectional dynamic microphone with popular ball-type styling, at a modest price. Loaded with extras for excellent performance, indoors or out. Feedback-free cardioid pickup; shock-mounted cartridge; wind and pop filters. 50-13,000 Hz. Hi-Z. Output, −58 dB. Lockable on-off switch. Cannon connector with 15′ 1-cond. detachable cable. Swivel adapter. Satin chrome. 6½x2″ dia. Wt., 1½ lbs.
12 A 7276.......................36.00

12 A 7277. Model 588SAC. Above, but wired plug end assembly for use as MC1F, MC1M or phone plug...37.20

12 A 7278. Model 588SB. Like 588SA, but low-Z, −59.5 dB output. 15′ 2-conductor cable...............36.00

Unisphere I
63.00
B

B Model 565S "Unisphere I." Feedback-free, dynamic cardioid ball-type mike for quality hi-fi recording and PA use, indoors or out. Wire-mesh screen protects from breath blasts and wind. 50-15,000 Hz. Outputs: 50-250 ohms, −57 dB; hi-Z, −54.5 dB. 15-ft. cable, on-off switch, swivel mount. Chrome, black, 6¼x2″.
12 A 7211. Wt., 2½ lbs...........63.00

12 A 7303. Model 565. No on-off switch, Swivel adapter. 2½ lbs...........60.00

12 A 7216. Model 566. Deluxe version of 565S. 40-15,000 Hz.............88.20

Unisphere A
40.80
C

C Model 585SA "Unisphere A." Ball-type unidirectional dynamic mike with anti-feedback feature plus a special filter for undistorted voice and music, indoors or outdoors. For use with good-quality sound systems or hi-fi recording systems in auditoriums, theaters, churches, night clubs, picnic areas, ball parks—anywhere good voice or music transmission is neede 50-13,000 Hz response. Hi-Z onl −56.5 dB. Shock mounted replaceab cartridge. One-conductor, 15-ft. d tachable shielded cable. 6¾x2$\frac{1}{16}$″ di Shpg. wt., 2¼ lbs.
12 A 7304...........................40.

12 A 7231. Model 585SAC. Above, wi wired plug end assembly for use MC1F, MC1M or phone plug...42.0

12 A 7305. Model 585SB. 585SA abov low-Z, 2-cond. 15′ cable.........40.

12 A 7232. Model 585SAV. Same 585SA above, but with volume contr to regulate amplifier output at micr phone.............................45.6

12 A 7266. Model 585SAVC. Same 585SAV above, with pre-wired plu end assembly for use as MC1 MC1M or phone plug...........46.8

12 A 7274. Model 585SBV. 585SA above, but low-Z only............45.6

General-purpose omnidirectional dynamic Microphones

D Model 533SA. For recording, entertainers, PA; indoor, outdoor use. Wind, breath, pop filters. On-off switch. 40-11,000 Hz. Hi-Z. −55 dB. 1-cond. 15′ cable. Swivel adapter. Chrome. 6⅝x2$\frac{1}{16}$″.
12 A 7309. Wt., 1¾ lbs.........31.80

12 A 7318. Model 533SAC. Above, with prewired plug end for use as MC1F, MC1M or phone plug 33.00

12 A 7338. Model 533SB. 533SA above, but low-Z, −55.5 dB. 31.80

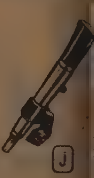
12 A 7279. Model 533SAV. 533SA, above, with volume control..36.00

12 A 7280. Mode 533SAVC. 533-SAC, with volume control...37.20

E Model 579SB "Vocal Sphere." Natural sound for field or stud o. Wind, breath filters. Lockable on-off switch. 50-15,000 Hz. Low-Z, −59 dB. Swivel adapter. 20′ 2-cond. cable. 6⅜x1$\frac{9}{16}$″.
12 A 7281. Wt., 2 lbs........45.00

F Model 540S "Sonodyne II." 50-13,000 Hz response. On-off switch. Hi-Z, −53.5; low-Z, −56 dB. Swivel. 15′ cable. 3½x1¾″.
12 A 7132. Wt., 3⅝ lbs...........31.20
12 A 7395. Model 540. No switch. 30.00

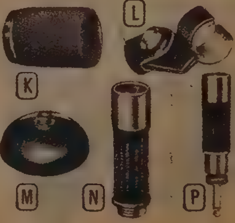
G Model 51S "Sonodyne I". 60-10,000 Hz. 30-50/150-250 ohm/Hi-Z. −51 dB. Swivel. 15′ cab. 4½x3x4″.
12 A 7136. With switch. 3½ lbs. 32.40
12 A 7228. Model 51. No switch. 31.20



H Model 575S. 40-15,000 Hz. Hi- −56 dB. On-off switch, stand ada ter, lavalier cord. 7′ cable. Less bas 4¾x1⅛″ dia.
12 A 7462. Wt., 1 lb..................15.0
12 A 7471. Model 575SB. Low-Z. 13.2

J Model 430. Controlled magneti 60-10,000 Hz. 150-250 ohms/Hi- −52 dB. On-off switch, swivel adapte 15′ cable. Less base. 6¾x1¾″
12 A 7213. Wt., 2½ lbs.........24.0

Accessories for Shure microphones on these two pages



K A-2WS Windscreen. For 545S, 578S, 546, 545L
12 A 7308. 4x2¼″. Shpg. wt., 5 oz.................4.

L A-25B Adapter. 90° swivel adapter; ⅝″-27 thd.
12 A 7446. Shpg. wt., ½ lb......................3.

M S-38B Base. For mikes with stand adapter.
12 A 7445. Shpg. wt., 1½ lbs.....................3.

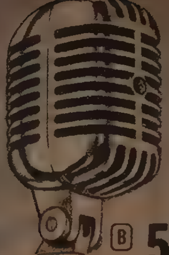
N A95A Transformer. Matches 35-50 or 150-250 oh microphone to hi-Z input. MC1F output, XL 3-11 input. 20-20,000 Hz. ±1 dB. 2½x¾″ dia.
12 A 7466. Shpg. wt., 9 oz.......................11.

P A95P Transformer. A95A, but phone plug outpu
12 A 7282. Shpg. wt., 10 oz......................12.

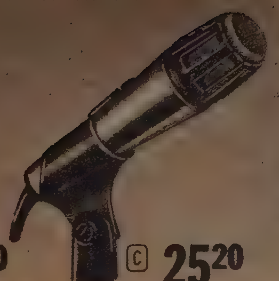
Buy your microphone on Credit Terms—see page 43

SHURE
Unidyne dynamic cardioid Mikes

A 56^{40}



B 53^{40}



C 25^{20}

545S "Unidyne III." Unidirec-
dynamic microphone for
-free use by entertainers and
and in hi-fi recording and
address work. On-off switch.
nount permits aiming it in any
. Wind and "pop" filter re-
eath and wind noises for clear
nd music reproduction. 50-
Hz response. Outputs: low-Z,
hms, −57 dB; hi-Z, −55 dB.
achable cable. 5¾x1¼" dia.
33. Shpg. wt., 3 lbs. 56.40

1. **Model 545.** Above, but no
witch. Swivel adapter . . . 53.40

58. **Model 546.** Deluxe version
ock-mounted 3⅝ lbs. . . 85.20

"Unidyne II." Multi-imped-
unidirectional dynamic micro-
offers feedback-free perform-
PA, recording, entertainment.
0 Hz response. Outputs: low-
ohms, −55.5 dB; 150-250
56.5 dB; hi-Z, −55.5 dB. On-
ch, swivel mount and 15-ft.
cable. 4½x2¼x3¼".
35. Wt., 3⅛ lbs. 53.40

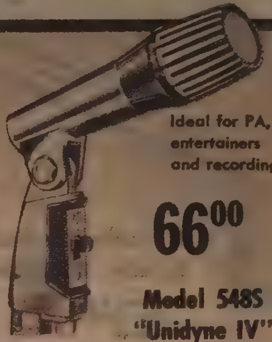
12 A 7234. Model 555 "Unidyne II." Same as Model 558W, but no on-off switch. Shpg. wt., 3⅛ lbs. 52.20

12 A 7235. Model 556S. Deluxe version of 558W. Frequency response, 40-15,000 Hz. Shock-mounted 85.20

C **515SA "Unidyne B."** Low-cost dynamic unidirectional microphone solves sound system feedback and "boominess" problems. Provides excellent performance for low-budget sound systems and general purpose use. Unidirectional pickup pattern. Frequency response, 80-13,000 Hz. Hi-Z output, −58 dB. On-off switch and swivel adapter for stand or hand-held use. With 15-ft. 1-conductor, non-detachable shielded cable. Smart modern styling, with chrome and black housing. 6⁷⁄₁₆x1½" dia. 1½ lbs.
12 A 7217. . . . . 25.20

12 A 7283. Model 515SAC. Above, but pre-wired plug end assembly for use as MC1F, MC1M or phone plug . . 26.40

12 A 7227. Model 515SB. Low-Z version of 515SA, −59.5 dB. With 15-ft. 2-conductor cable 25.20



Ideal for PA, entertainers and recording

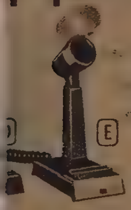
66^{00}

Model 548S "Unidyne IV"

Rugged, feedback-free unidirectional dynamic microphone for entertainers, PA systems and high-fidelity recording. Features improved shock mounting; wind, pop and blast filters; on-off switch and swivel mount. 40-15,000 Hz response. Dual impedance: low-Z, −57 dB; hi-Z, −55 dB. 15-ft. 2-conductor detachable cable with broadcast-type Cannon connector. Smart chrome and black housing. Size, 5¹³⁄₁₆x1⁹⁄₁₆" dia. Shpg. wt., 2¼ lbs.
12 A 7200. 66.00

12 A 7203. Model 548. Above, but no on-off switch or swivel mount. With swivel adapter. Wt., 2 lbs. 63.00

p-quality Microphones for communications and paging



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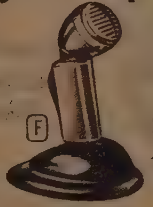

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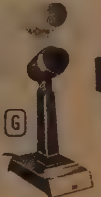

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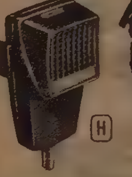

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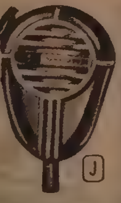

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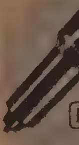

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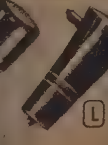

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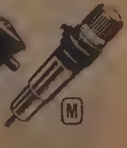


M

450. Controlled magnetic
with adjustable stand, lock-
ush-to-talk bar. Mike relay.
000 Hz response. Hi-Z, −54
w-Z, −55 dB. "Armo-Dur"
. 7' cable. 10½x5¾x4".
44. Wt., 2¼ lbs. 31.20

444T. Controlled magnetic
with solid-state preamp and
control. Output, 2-45 mV.
able height, lockable push-to-
. With self-contained battery.
0 Hz. Less than 1000 ohms.
dj.)x4x5¾".
49. Wt., 2⅛ lbs. 31.20

41. **Model 444.** Above, but no
. Hi-Z only 27.00

520SL. Controlled magnetic.
able grip-to-talk bar. 100-
z. Hi-Z, −52.5 dB. 7' cable.
/green, 9⅝x5x7". 5 lbs.
33. . . . . 28.20

G **Model 522 "Uni-Com."** Unidirectional base station mike suppresses background noise and feedback. Adj. height; press-to-talk bar. 60-11,000 Hz. Output: hi-Z, −56.5 dB; low-Z, −57 dB. 7' 4-cond. cable. "Armo-Dur" housing. 12¼(adj.)x4x5¾".
12 A 7287. Wt., 2¼ lbs. 39.60

H **Model 202.** Ceramic noise-reducing microphone. 200-4000 Hz response. Hi-Z, −50.5 dB output. Press-to-talk. Bracket, 5' coiled cable.
12 A 7465. Wt., 1 lb. 12.60

J **Model 404C.** Controlled magnetic microphone for communications use. Hi-Z, −54 dB output. 400-4000 Hz response. Push-to-talk. Bracket. 5½' coiled cable. 3¾x2⅝x2".
12 A 7141. Wt., 1 lb. 21.00

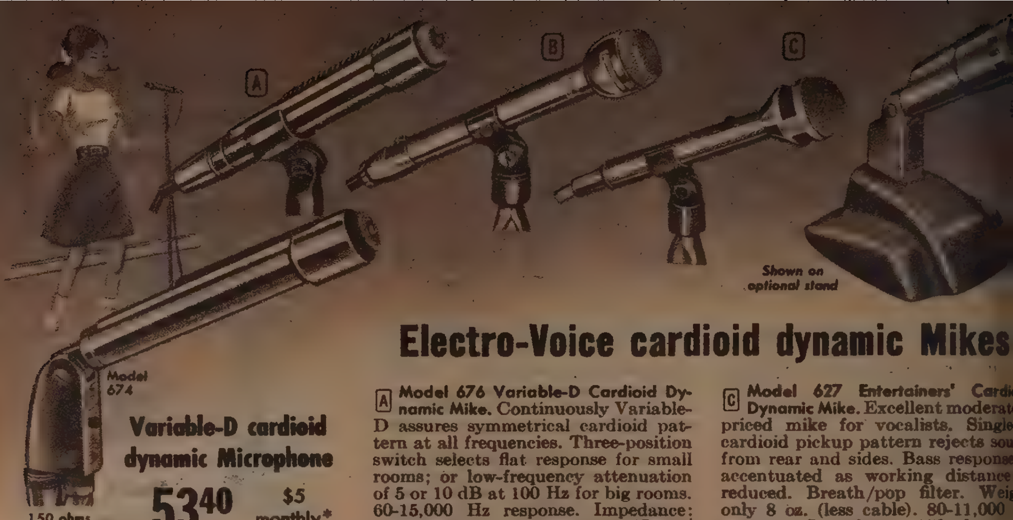
12 A 7140. Model 404B. As above, but 150-250 ohm impedance. Output level, −52 dB. 21.00

Lavalier-type Microphones

K **Model 560.** Dynamic omnidirectional mike for lavalier or hand-held use. With lavalier for lectures, demonstrations where hands must be free. 40-10,000 Hz. Dual output: 150-250 ohms or hi-Z, −56.5 dB. 18' cable. 4x1½" dia.
12 A 7461. Wt., 1 lb. 27.00

L **Model 420.** Controlled magnetic omnidirectional, with lavalier assembly for PA uses and lectures, where hands must be free. Also for hand-held use. 60-10,000 Hz. 150-250 ohms or hi-Z, −52 dB. 20' cable. 3¾x1¾".
12 A 7212. Wt., 12 oz. 19.20

M **Model 545L "Unidyne III."** Broadcast-quality dynamic cardioid. For lavalier or gooseneck use in PA, hi-fi recording. 50-15,000 Hz response. Low-Z, −57.5 dB. 20' cable; lavalier. 5⅛x1¼".
12 A 7339. Wt., 2 lbs. 44.40



Electro-Voice cardioid dynamic Mikes

Variable-D cardioid dynamic Microphone

53^{40} $5 monthly*

Model 674. Continuously "Variable-D" feature assures symmetrical cardioid pattern at all frequencies. Provides maximum front-to-back ratio with uniform response. Three-position bass-tilt switch adjusts for feedback control in public address and recording. 60-15,000 Hz response makes it an ideal mike for tape recording, musical entertainment, public speaking, paging and communications use.

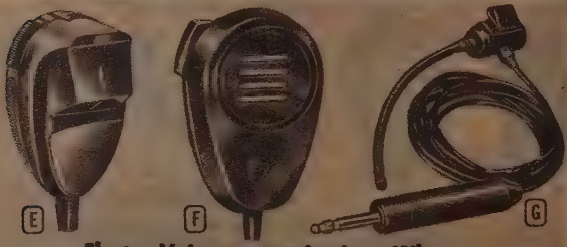
Dual impedance: 150 ohms and hi-Z. Output: −57 dB. On-off switch. QC-4M connector for quick impedance changes without tools. 15′ two-conductor cable. Satin chrome finish. 7⅞x1¼" dia. ⅝"-27 stud mount.
12 A 7098. Wt., 2 lbs. 53.40

A **Model 676 Variable-D Cardioid Dynamic Mike.** Continuously Variable-D assures symmetrical cardioid pattern at all frequencies. Three-position switch selects flat response for small rooms; or low-frequency attenuation of 5 or 10 dB at 100 Hz for big rooms. 60-15,000 Hz response. Impedance: 150 ohms/hi-Z. Output: −57 dB. 15′ two-conductor cable, QC-4M connector, 300 stand adapter. ⅝"-27 thread. Satin chrome finish. 7⅜x1¼" dia.
12 A 7432. Wt., 2 lbs. 53.40

B **Model RE15 Professional Super-Cardioid Dynamic Mike.** Provides maximum rejection of unwanted off-axis noise. Off-axis response is symmetrical with front response to eliminate coloration. Bass-tilt switch restores spectrum balance for longer reach. 80-15,000 Hz. 150 ohms. −56 dB. 18′ cable. Matte nickel finish. $6\frac{1}{32}$x1⅜". Metal case, stand adapter.
12 A 7252. Wt., 4 lbs. 153.00
Model RE10. As above, for less demanding uses. 80-13,000 Hz. −55 dB.
12 A 7396. Wt., 3 lbs. 90.00

C **Model 627 Entertainers' Cardi Dynamic Mike.** Excellent moderat priced mike for vocalists. Single cardioid pickup pattern rejects sou from rear and sides. Bass response accentuated as working distance reduced. Breath/pop filter. Weig only 8 oz. (less cable). 80-11,000 response. Impedance: 150 ohms a Hi-Z. Output: −58 dB. 15′ two-co ductor cable. 6" long, 1½" dia. he ¾" shank. ⅝"-27 thread. Chrom
12 A 7099. Wt., 1½ lbs. . . . . . . .37.

D **Model 664 Variable-D Cardioid Mi** Popular dynamic mike for reco ing, communications and PA u Variable-D cardioid pickup pattern rejection of unwanted backgrou noise. Pop-proof wire mesh gr minimizes breath blasts to allow cl talking without boominess. Shielc Acoustalloy diaphragm. 60-15,000 Dual imp., 150 ohms/Hi-Z. Outp −58 dB. On-off switch. 15′ cab ⅝"-27 thread. Chromed. Less sta (Model 418 below). 7¼x1⅞".
12 A 7241. Wt., 3 lbs. 53

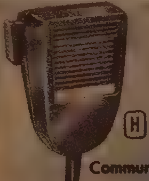


Electro-Voice communications Mikes

E **Model 205STCKK Differential Carbon Mike.** Close-talking, noise-canceling mike for aircraft and emergency communications with high intelligibility under severe noise. Blast-proof, waterproof, shock-resistant. Press-to-talk. 50 dB output at ¼". FAA approved. Black. 5′ coiled cord. 4x2¼x2".
12 A 7035. Shpg. wt., 1 lb. 31.50

F **Model 600E Dynamic Mike.** Mobile mike with press-to-talk button. 100-7,000 Hz response; −55 dB. Hi-Z type is wired straight through for VOX; balanced low-Z is wired for open circuit paging. 6′ coiled cord. Bracket. Gray. 2⅛x4x1½".
12 A 7483. Hi-Z type. Shpg. wt., 1 lb. 24.60
12 A 7485. Balanced Low-Z type. Shpg. wt., 1 lb. 24.60

G **Model 967M Transistorized Aircraft Mike.** Provides background noise reduction equivalent to true noise-canceling mike. For connection to carbon input circuits with 12 to 24 V supply. Output, 40 dB. Press-to-talk. 250 ohms. FAA approved. Attache: to headphones. Black. 4½′ coiled cord. Overall, 5½" long.
12 A 7583. Shpg. wt., 2 lbs. 85.50



Low-cost ceramic Mikes

J
General Purpose

H **Electro-Voice Model 714 Ceramic.** Omnidir tional. 100-7000 Hz. Hi-Z; −55 dB. Push-talk. Blue. $3\frac{5}{8}$x$2\frac{1}{2}$x$1\frac{7}{16}$". 5′ cord, bracket.
12 A 7259. Shpg. wt., 1 lb. 10
Electro-Voice 717. As above, but noise-canceli
12 A 7433. Shpg. wt., 1 lb. 12

J **Electro-Voice Model 721 Ceramic.** For gene use. 100-5000 Hz. Hi-Z; −52 dB. 3⅜x2 1". Integral fold-out stand, 5′ cable.
12 A 7255. Shpg. wt., 1 lb. . . . .

Accessories for Electro-Voice Mike

12 A 7146. Model 418 Desk Stand. For 611, 6 630, 641, 636, 674; latest 644, 664 with sn studs. Gray. $2\frac{1}{16}$x$4\frac{7}{16}$x$5\frac{1}{2}$". 3 lbs. . . . .

12 A 7397. Model 422 Desk Stand. Accepts 1" ¾" stand clamps. Protective rubber sh mount. Shpg. wt., 3 lbs. 1

12 A 7340. Type 502B Transformer. Matches l Z mike to hi-Z input. 30" cable. 1 lb. . . . .

12 A 7332. Type 376 Windscreen. For model and 674 microphones. ½ lb. . . . .

*Buy your microphone with no money down—see page 4

A
B
C
D
Model 631

:lectro-Voice omnidirectional Mikes

del RE55 Professional Dynamic
:e. Omnidirectional response
especially suited to full-range
recording and other exacting
sional applications. For hand
tand use. Pop-proof; built-in
filter. Response is extremely
; mike can be calibrated for use
ondary lab standard. 40-20,000
50 ohms. Output: −55 dB. 18′
conductor cable. Satin nickel
10½x1⅞″; ¾″ shank.
250. Wt., 1¼ lbs. 126.00

del 654A All-Purpose Dynamic
:e. "Slim-trim" broadcast-qual-
ike may be used with a stand,
held or as a lavalier. Ideal for
ncers, interviewers, other de-
ng applications. Wide response
15,000 Hz. Excellent voice re-
ction. Low impedance. Output:
B. Built-in Cannon XLR-3 con-
. Non-reflecting gray finish.
1⅛″ dia. 18′ three-conductor
With standard ⅝″-27 stand
, lavalier neck cord.
117. Wt., 3 lbs. 63.00

C **Model 635A Performers' Dynamic Mike.** Widely accepted professional omnidirectional mike for hand or stand use. Four-stage pop and blast filter eliminates need for external windscreen. Smooth, shaped response; 80-13,000 Hz. Low impedance. Output: −55 dB. Magnetically shielded diaphragm, turned-steel case. Cannon XLR-3-11 connectors. Non-reflecting nickel finish. 6x1⅜″ dia. 18″ three-conductor cable. Stand adapter.
12 A 7481. Wt., 1 lb. 49.20

D **Model 636 Dynamic Microphone.** Deluxe omnidirectional dynamic mike for PA, recording and general use. Pop-proof head, wide pickup range. 60-13,000 Hz response. Dual selectable impedance: 150 ohms or hi-Z. Output: −58 dB. On-off switch in stand mounting. Swivel base has standard ⅝″-27 thread. Satin chrome finish. 10¼″ long, including stud; 1⅛″ diameter. Nearly impervious to damage from mechanical shock. With 15″ two-conductor cable, QC-4M connector.
12 A 7244. Wt., 2 lbs. 45.60

Hand-size dynamic vocal mike

37.80 $5 monthly* *Ideal for entertainers*

Model 631. Hand-size microphone is ideal for vocal and instrumental entertaining, PA and recording. Silent, magnetic on-off switch has removable actuator button; mike can be left on when button is removed. Lightweight, rugged and shockproof, for hand or stand use. Four-stage filter permits close-up use without blasting, "pop" or distortion. Virtually unaffected by breath or wind. Omnidirectional pickup pattern, with 80-13,000 Hz response. Hi or low impedance. Output: −55 dB. 6⁵⁄₃₂x1²⁵⁄₆₄″. 16′ cord.
12 A 7251. Low-Z. 3 lbs. 37.80
12 A 7247. Hi-Z. 3 lbs. 37.80

Miniature lavalier Microphones

del 649B Miniature Lavalier. A
orite for TV use, "walk-about"
ations. Weighs only 31 grams
able). 70-10,000 Hz response.
. −61 dB. "Pop-proof" wire
grille. Non-reflecting gray finish.
lavalier neck cord, belt, clamp,
ble, stand clamp. 2¼x¾″ dia.
118. Wt., 1 lb. 66.00

F **Model 647A Dynamic Lavalier.** Weighs only 2 ounces. Ideal for public speaking or reading, sales demonstrations—any PA use requiring freedom of hands. 70-10,000 Hz response. −60 dB. Gray 18′ cable, lavalier assembly, stand adapter. 3⅝x¾″. dia.
12 A 7264. Hi-Z. 1 lb. 51.90
12 A 7125. Low-Z 1 lb. 51.90

utomatic Telephone Dialer

lial. Automatic dialing system lets you
telephone calls by pressing a button!
et fast and foolproof connections with
ency numbers, friends, relatives—even
istance or inter-office calls. No cards
es. Up to 36 phone numbers are stored
'memory bank" consisting of 36 un-
ble plastic disks. To dial, just slide a
r on the visual index to the name you
call, pick up the receiver, and press a
button. Prestodial then dials the call
atically—and correctly. Works with
hone. Easily installed; no additional
needed. Comes with programmer for
g disks, and 42 memory disks. Size,
3¼″. For 110 V, 60 Hz AC.
413 S. Shpg. wt., 6 lbs. 99.95
Memory Disks. Package of 12.
414. Shpg. wt., 6 oz. . . . . Pkg. 3.95
ounting Bracket. For memory bank.
415. Shpg. wt., 2 oz. 1.00

With programmer, 42 memory disks

NO MORE
looking up telephone numbers

Automatic dialing at the touch of a button—computerized memory bank stores 36 phone nos.

99.95
$5 monthly*

money down, low monthly payments . . . see page 438

Citizens Band base station dynamic Mike
29⁹⁵
A
B
C
D
E
G
F

Fanon multi-purpose dynamic Microphone

[A] Model MKM-21 Cardioid Mike with Preamp. Built-in 2-transistor preamp helps boost range of CB and Ham transmitters. Variable output, 2-100 mV. Talk-listen bar with lock, plus switch in base. Electronic or relay switching. Adjustable head. 100-8000 Hz. 1000 ohms. Die-cast aluminum, 7¾x3¾x5½". 6-ft. cord, battery.
12 A 7360. Japan. Wt., 3 lbs.........29.95

[B] Model MKC-52 Cardioid Mike. Excellent for entertainers. Volume control, on-off switch, mesh-screen wind and pop filter. 50-13,000 Hz. Dual impedance: 150 and 50K ohms. Output: high, −52 dB; low, −71 dB. Satin chrome. Mike holder/floor stand adapter. 5¾x1¾". 20-ft. cable.
12 A 7361. Japan. Wt., 2 lbs.....19.95

[C] Model MKC-54 Cardioid Mike. Another favorite with entertainers. Has wind and "pop" filter, on-off switch, switchable dual impedance, 50 and 50,000 ohms. Frequency response: 60-12,000 Hz. Output: high, −60 dB; low, −66 dB. Satin chrome finish. With mike holder/floor stand adapter, 20-ft. cable. 7⅞x2". Japan.
12 A 7362. Wt., 2½ lbs.............17.95

[D] Model MKO-42 Omnidirectionl Mike. Big value in a general-purpose PA mike. Mesh-screen wind and pop filter. On-off switch. Head tilts 90°. Response: 50-14,000 Hz. Dual impedance: 150 and 50K ohms. Output: high, −58 dB; low, −72 dB. Satin chrome, 8¾x1½". From Japan.
12 A 7363. Wt., 3 lbs.............11.95

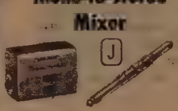
[E] Fanon MKX-32 Omnidirectional Cr tal Mike. Use it 3 ways: har stand, or lavalier. Response, 10,000 Hz. High impedance. Outpu −55 dB. On-off switch. Mike hold lavalier cord, 8-ft. cable. 7x1½
12 A 7364. Japan. Wt., 1 lb.........3.

[F] Model MKO-46 Omnidirectional Mi Miniature model for tape recorde Response, 120-10,000 Hz. High i pedance. Output, −57 dB. With 8- cable and ⅛" plug. 5⅜x⅞". Japan
12 A 7366. Wt., 1½ lbs...........5.

[G] Thoro Test Mike. For cassette corders. On-off switch, 6-ft. co remote control cord and plug, sta and lavalier. 100-12,000 Hz. Min ture, subminiature plugs. 200 ohms.
12 A 7365. Japan. Wt., 1 lb.........4.

Mike Accessories by Switchcraft and Shure

Mono-to-stereo Mixer

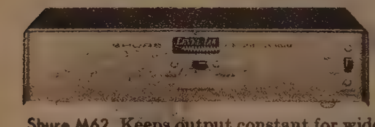


[H] Switchcraft 306 Stereo Mixer. Four monophonic channels to two stereo. Four input jacks. Hi-Z. Two phono jack outputs. "Tiny-Jax adapter plug. 2x3x6".
12 A 7171. Shpg. wt., 1½ lbs...........................15.00
12 A 7172. **306TR Mixer.** Above, with battery-powered solid-state stereo amplifier. With battery. 1½ lbs.............24.00

[J] Switchcraft 503 Mike Preamp. Matches solid-state inputs. 40K/2K ohms input, 2K output. 6-25 dB gain. Battery. 12" cable. ¼" tini-jack/plugs, adapter. 2x2x1".
12 A 7052. Shpg. wt., 4 oz................................9.90

4-Channel solid-state stereo Mixer Amplifier

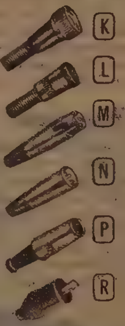
Switchcraft 307TR. Inputs: 4 low-level mike, 60 dB gain: 2 phono, 40 dB; 4 aux., 20 dB. Up to 2-V rms output. 20-20,000 Hz. 3½x12x7¼". Requires 2 "D" batteries.
12 A 7437. Shpg. wt., 4½ lbs..........................87.00
12 A 7438. **Model 308TR.** Above, for 115 VAC. 5 lbs...96.00



Solid-state audio level Controller

Shure M62. Keeps output constant for wide variations of input. Dual-impedance input and output: 500/100,000 ohms and 10/500 ohms respectively. 20-20,000 Hz. Cannon receptacles. With 9-volt battery. 2⅝x11⅜x5¼".
12 A 7143. Shpg. wt., 3 lbs..............................57.00

Switchcraft mike Connectors



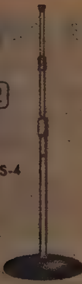
For positive contact. One-contact 250 fit Allied PA amplifiers. To splice 2 co use one Type 2501F and one Type 2501 Types A3F, A4F, A3M, A4M are quic ground 2 and 4-contact insulated typ Type 05BL3M, miniature 3-pin plu contact friction coupling. Type BLM5M is same, 5 pins. Type 01QK2 is 2 pin. Shpg. wt., 4 oz.

Stock No.	Type	Fig.	Description	EA
12 A 7405	2501F	K	Plug or Jack	.4
12 A 7406	2501M	L	Plug	.3
12 A 7417	A3F	M	Fem. Conn.	1.4
12 A 7418	A4F	M	Fem. Conn.	1.8
12 A 7419	A3M	N	Male Conn.	1.2
12 A 7420	A4M	N	Male Conn.	1.3
12 A 7390	05BL3M	P	Plug	1.0
12 A 7391	12BL5M	P	Plug	1.1
12 A 7008	05BL5M	P	Plug	1.2
12 A 7009	01QK2M	R	Plug	.3

5-channel solid-state monophoni Mixer

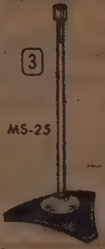
Shure M68. Has 4 inputs for dynamic or ribbon mik Switch-selected low or high-impedance mike in/outp high-impedance, high-level auxiliary input/output. VDC jack. Frequency response: 30-20,000 Hz. 2⅝x11 5¼". Male Cannon XLR-3-14 type input receptacles. 105-130 volts, 50-60 Hz AC. Shpg. wt., 4 lbs.
12 A 7142...78.
12 A 7368. **Shure M68FC.** Above, with female Cannon ty input receptacle. Shpg. wt., 4 lbs....................85.
12 A 7377. **Shure M68P.** Above, with Hi-Z input only. Lo Hi-Z output. Shpg. wt., 4 lbs............................63.
12 A 7384. **Shure LM68RM.** As M68FC above, but with bu in adjustable reverberation. Shpg. wt., 5½ lbs.......108.

ike Stands, Accessories by Atlas Sound



2

MS-4



3

MS-25

-11S Automatic Floor Stand. Press
ıtrol, tube lowers. Adjusts 39-
ıll chromed. 10″ base. ⅝″-27
. Shpg. wt., 13 lbs.
271 L2X. 18.66

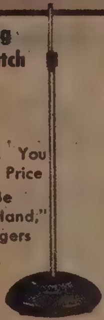
-4 Telescoping Floor Stand. Ad-
ıts 25-65″. 3 sections. Chromed.
ay wrinkle base. ⅝″-27 thread.
270 L2X. Wt., 10 lbs. 12.33

-25 Professional Floor Stand. "Air
ck Cushion" controls drop of
Adjusts 38-67″. 17″ chromed and
base. Chromed tube. ⅝″-27
: Shpg. wt., 22 lbs.
330 L2U. 21.66

Stand has long "Full Grip" clutch

8^{16}

- Full of Features You Want, Low in Price
- Long Clutch Can Be Gripped by "Hand," Not Just by Fingers
- Velvet-Quiet Slide Action

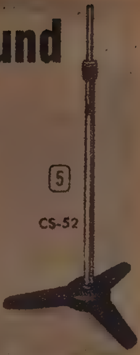


MS-10C. Deluxe mike stand inner-lined with bakelite to prevent jamming, sudden dropping. 2-section chromed tube adjusts 35-63″. 10″ gray base; self-leveling shock-absorbing pads. With standard ⅝″-27 thread. Shpg. wt., 10 lbs.
12 A 7325 L2X. 8.16

MS-11C. Above, but with all-chromed base. Wt., 13 lbs.
12 A 7326 L2X. 10.68

Take-Apart CS-33

4



5

CS-52

4 **CS-33 Take-Apart Floor Stand.** Collapsible to 22½″. Adjusts 26-64″. Chromed. 20″ base dia.; rubber feet. ⅝″-27 thread. Shpg. wt., 4 lbs.
12 A 7327 X. 11.52

5 **CS-52 Floor Stand.** Portable unit adjusts 34-62″. Chromed tube. 2-piece gray shrivel 15″-dia. base. ⅝″-27 thread. Shpg. wt., 9 lbs.
12 A 7450 X. 9.33

BB-1 "Baby Boom" Stand Attachment. (Not illus.) Converts any floor stand with ⅝″-27 thread to boom type. Adjustable counter balance. 31″ long.
12 A 7328 X. Wt., 3½ lbs. 6.51

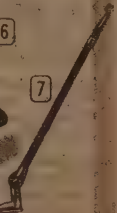
Desk Microphone Stands and multipurpose Support

7 Adjustable Desk Stand. Ad-
ıts 8-13″. With "Velvet Action"
adjustment. 4″ high, chromed
Gray 6″ dia. base. Standard ⅝″-
ead. Shpg. wt., 3 lbs.
186. . . . . 4.35

2 Multipurpose Support. Vertical
vel, 180°; horiz., 360°. 12¾″
2⅝″ base. Chromed. Standard
thread. Shpg. wt., 2 lbs.
273. . . . . 7.02

14 Contemporary Desk Stand.
s 3″ chromed tube. Handsome
shrivel base. Standard ⅝″-27
. Shpg. wt., 2 lbs.
109. . . . . 3.33

6



7

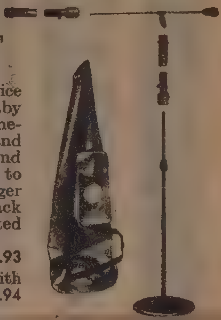
8

Combination Stand, Boom, Hanger

27^{93} With 2 Lock-On Attachments

"Porto-Stand" PS12C. Unique device incorporates mike stand, baby boom and cable hanger in one easy-to-assemble unit. Mike and boom disconnect in seconds and fold away into case. Height: 34 to 62″; 10″ dia. base. Cable hanger for tubes ⅞ to 1¼″ dia. Black vinyl carrying case with fitted compartments. Wt., 19 lbs.
12 A 7336 X. 27.93

12 A 7345 X. PS11C. Above, with chromed base. 20 lbs. 29.94



Microphone and Stand Accessories

10

11

12

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19

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21

22

No.	Fig.	Description	Wt.	EACH
110	9	Lock-on Mike Attachment	4 oz.	2.85
996	10	"Y" Mike Connector	2 oz.	1.38
189	11	Flexible 13″ Gooseneck	1 lb.	2.10
206 X	11	As above, 19″ long	1½ lbs.	3.00
187	12	Snap-on Mike Attachment	1 lb.	2.34
946	13	Mike Volume Control: Hi-imp.	6 oz.	4.08
207	14	Cable-Hanger; for ⅞-1¼″ stems.	½ lb.	2.10
190	15	Bracket Clamp; 6″ stem	1 lb.	3.00
106	16	3″ Extension Rod; ⅝″-27 ends	3 oz.	.74
105	16	As above, 6″ long	4 oz.	.74
950	17	Push-to-Talk Switch with lock	6 oz.	2.32
204	. . . .	Gyromatic Mike Lock Swivel	1½ lbs.	4.02

Mike Stand Adapters. Ideal for use with most desk and floor-type microphone stands. All adapters are heavy-duty chrome-plated units. Shpg. wt.: Models AD1, AD2, AD3, AD4 and AD5, 2 oz.; AD11 and AD12, 6 oz.

Stock No.	Type	Fig.	Description	EACH
12 A 7108	AD1	19	For adapting RCA mikes. ½″ male to ⅝″-27 female	.75
12 A 7198	AD2	20	⅛″ pipe female to ⅝″-27 male.	.54
12 A 7199	AD3	18	⅛″ pipe female to ⅝″-27 female.	.59
12 A 7201	AD4		¾″ long, ⅝″-27 male coupling.	.44
12 A 7202	AD5	18	⅝″-27 to ⅝″-27 female coupling.	.59
12 A 7103	AD12	21	Mike base flange. Male. ⅝″-27.	.80
12 A 7104	AD11	22	Mike base flange. Female. ⅝″-27.	.80

Allied® wide-dispersion 6-speaker Sound-Column for total PA coverag

64.95

Six powerful 6-inch speakers combine to deliver uniform sound over a wide 145° horizontal pattern . . gives you better PA coverage throughout the entire room without reverberation or feedback

Model 3350. Offers outstanding wide-angle dispersion and excellent sound projection for top PA coverage. Great for auditoriums, lecture rooms, theaters—any PA use. Six powerful 6" speakers offer fine sound reproduction and wide frequency response of 50-15,000 Hz.

Overall sound projection up to 250 feet (indoor). Completely ruggedized system. Voice coil of each speaker has aluminum nomax bobbin to handle high power at wide response without distortion. Extra-wide 145° horizontal, 30° vertical dispersion. Power capacity, 6 watts. Impedance, 16 ohms. Special mountin hardware is included for fast, accurate insta lation—easy as hanging a picture on a wal Handsome walnut wood-grain vinyl cabin adds to any decor. 41x11x6".
12 A 8002 U. Shpg. wt., 44 lbs. **64.9**

Model 3300. Four 8" speakers. 25-watt ca Dispersion: horiz., 140°; vert., 45°. 60-11,00 Hz. 8 ohms. Walnut wood-grain vinyl cabine
12 A 8001 U. 41x11x6". Wt., 37 lbs. **34.9**

Popular Sound-Columns for every purpose and budget

Ⓐ University Sound CS-2

Ⓑ Argos SD-1064 ESD-1061 MSD-1060

Ⓒ Utah SND-3

Ⓓ Electro-Voice LR4SA LR2SA

Ⓔ Atlas C-80

[A] University Sound CS-2. Six 5" speakers. Dispersion: hor zontal, 165°; vertical, 25°. 30 watts. 175-12,000 H 8 ohms. $31x5\frac{1}{2}x5$". Neutral finish.
12 A 7421 U. Shpg. wt., 14 lbs. **59.**

[B] Argos SD-1064. Six 5" speakers. Dispersion: horizont 120°; vertical, 30°. 30 watts. 200-10,000 Hz. 16 ohm Walnut clear-guard vinyl cabinet, $30\frac{1}{4}x7x3\frac{1}{8}$".
12 A 7880 X. Shpg. wt., 10 lbs. **43.**

Argos ESD-1061. Six 5" speakers. Dispersion: horizont 120°; vertical, 30°. 30 watts. 100-12,000 Hz. 16 ohm Beautiful walnut "art frame" cabinet, $33\frac{1}{4}x10\frac{1}{2}x4$".
12 A 7089 U. Shpg. wt., 16 lbs. **54.**

Argos MSD-1060. Six 8" speakers. Vertical dispersion, 30 60 watts. Frequency response, 70-15,000 Hz. Impedanc 16 ohms. $50\frac{1}{2}x10\frac{3}{4}x8\frac{1}{4}$".
12 A 7093 U. Shpg. wt., 40 lbs. **83.**

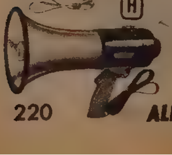
[C] Utah SND-3. Six 8" speakers. Dispersion: horizont 120°; vertical, 30°. 72 watts. 50-15,000 Hz. 8 ohm Walnut grain plastic-impregnated finish. $51x11x7\frac{3}{4}$".
12 A 7529 U. Shpg. wt., 42 lbs. **79.**

[D] Electro-Voice LR4SA Straight Line Radiator. Restri high-frequency dispersion to simplify feedback contr Dispersion: horizontal, 160°; vertical, 30°. 200-10,000 H 40 watts. 8 ohms. Tan aluminum cab. $48\frac{3}{4}x6\frac{5}{16}x4\frac{11}{32}$".
12 A 7033 U. Wt., 27 lbs. . . . . **99.**

Model LR2SA. Short, easily handled version of LR4SA. Ve tical dispersion, 45°. 20 watts. Frequency response, 20 10,000 Hz. Impedance, 8 ohms. $24\frac{1}{2}x6\frac{5}{8}x4\frac{7}{8}$".
12 A 7031 U. Shpg. wt., 16 lbs. **55.**

[E] Atlas C-80. Six 6" speakers. Dispersion: horizontal, 120 vertical, 36°. 80 watts. 100-15,000 Hz. 16 ohms. Vin clad metal, wood-grain finish. $45\frac{1}{2}x8\frac{3}{4}x6\frac{3}{8}$".
12 A 7037 U. Shpg. wt., 28 lbs. **8**

Solid-state battery-powered Megaphones



[F] Fanon MV-4S. Volume control. 300-yd. range. 4 watts (6 peak). Built-in siren. $7\frac{1}{4}$" bell. Uses 4 "D" batteries, below.
12 A 7333 X. Shpg. wt., 4 lbs. **49.50**

[G] Fanon MV-3. Hi-lo vol. switch. 200-yd. range. $8\frac{3}{4}$" bell. $13\frac{1}{4}$" long. With carrying strap. Uses 4 "D" batts., below.
12 A 7324 X. Shpg. wt., 4 lbs. **32.95**
18 A 5779 "D" Batteries. 10 oz. . . . . . **Pkg. 2/33¢**

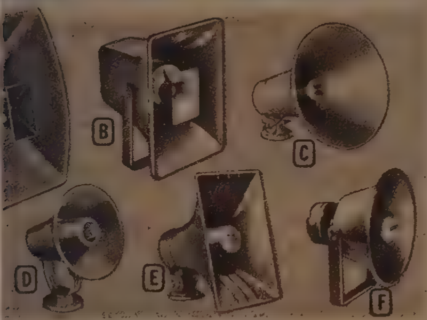
[H] Fanon MV-8S. Vol. control. 600-yd. range. 8 watts (10 peak). Built-in siren. 9" bell. Strap. Uses 6 "C" batts., below.
12 A 7359 X. Shpg. wt., 5 lbs. **65.95**
18 A 5865. "C" Batteries. 10 oz. . . . . **Pkg. 2/33¢**

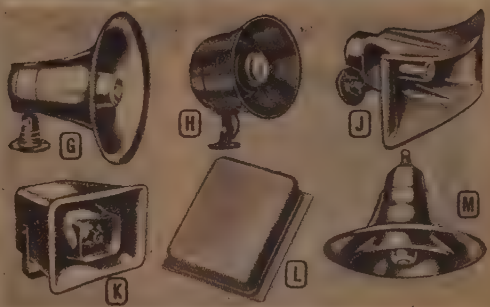
[J] Federal A-12 Voice Gun. Pres to-talk switch. 500-yd. rang Horn diameter, $7\frac{1}{4}$". With stra Uses 8 "AA" batteries, below.
12 A 7319 X. Wt., $5\frac{1}{4}$ lbs. . . . **90.**
18 A 5083 "AA" Batteries. Shp wt., 10 oz. . . . . **Pkg. 2/2**

[K] Electro-Voice PM16EAC. Has e ternal noise-canceling mike wi on/off switch, volume contr coiled cord. 650-yd. range. 10 wat (16 watts peak). Siren. Bell dia eter, $11\frac{1}{2}$". With carrying stra Uses 8 "C" batteries, at left.
12 A 7355 X. Wt., 6 lbs. . . . . . **78.**

SHIPPING NOTE: Items with suffix U, W or Z in stock no. sent tr or express. See Ordering Information pa

oor and outdoor Projectors and Speakers





ELECTRO-VOICE

eatherproof Projectors and Speakers

olyester horns. Virtually indestructible, absolutely oof. **Types 848ACDP and 847ACDP.** Compound-Dif- design with two diffraction horns for higher ar- on without peaking response. **Type 844A.** General- paging speaker. **Type PA-12.** For paging use where ty is a prime factor. Special diaphragm eliminates for clean response. **Type PA30A.** Rectangular paging ith ultra-smooth response for both voice and Type PA30AT-7. Same as PA30A, but with 70.7 volt mer. **Type PA30R.** Same design as PA30A, but with orn. **Type PA30RT-7.** PA30R with 70.7 volt trans- **Type PA30R-45.** PA30R with 45-ohm voice coil. All 0° dispersion, except Type 844A, 90°. All are 8 pedance and 30 watts power capacity except Type , 25 watts. Battleship gray finish.

	Mfr's Type	Fig.	Response	Size in Inches	Wt., Lbs.	EACH
40 U	848ACDP	A	150-10K	20½x10½x20	16¾	54.60
7 X	847ACDP	B	250-10K	11¾x7¾x10⅞₂	10	37.20
5 X	844A	C	250-13K	7½x9⅞ dia.	13	24.00
6 X	PA12	D	325-14K	7½x6¾	5	16.20
6 X	PA30A	E	250-14K	11x6½x8½	4½	22.80
86 X	PA30AT-7	E	250-14K	11x6½x8½	7½	30.00
47 X	PA30R	F	250-14K	9¾x10 dia.	6¾	24.00
49 X	PA30RT-7	F	250-14K	9¾x10 dia.	7½	30.60
88 X	PA30R-45	F	250-14K	9¾x10 dia.	7½	25.20

ne Transformer. 7½-watts, 25 volts. Primary taps; , 312, 624, 1248 ohms. Secondary: 8 ohms. Power 7.5, 4, 2, 1.5 watts. For PA-12 above.
39. Shpg. wt., 1½ lbs.......................6.60

ne Transformer. Above, for 70.7 volt uses. Primary 60, 1250, 2500, 5000, 10,000 ohms. Secondary: 8 Power taps at 7.5, 4, 2, 1.5 watts.
68. Shpg. wt., 1½ lbs.......................6.60

pact wide-range
therproof Speaker

69⁹⁰

ce compression molded
of highly resilient
lled polyester

er 1A. All-weather speaker for outdoor PA or ex- uses. Has 12" wide-range driver for good bass e; Radax dual-cone driver assembly for crisp highs. ssion molded housing. Universal "U" bracket for ounting. 80-10,000 Hz. Dispersion: 120°. Power : 30 watts (60 watts peak). Impedance: 8 ohms. ical crossover, 4000 Hz. 21½x21½x8½".
4 U. Shpg. wt., 29 lbs.......................69.90

UNIVERSITY SOUND

Weatherproof PA and Intercom Speakers

For "talk-back" microphones, PA speaker applications. All have weatherproof phenolic diaphragms for outdoor use under any conditions. Ideal for two-way intercom systems. **Types IB-A8 and IB-T.** Medium-power paging and talk-back speakers. **Types MIL-A8 and MIL-T.** For medium and low-power systems. **Type DLC-8.** Compact horn for low-power uses. **Types CIB-A8, CMIL-A8, and CMIL-T.** For wide area coverage in low-power systems where moderate noise levels are present. **Type MLC.** Two-speaker system providing high-frequency response for outdoor uses. **Type DW-30.** Specially designed wall or ceiling-mounted speaker for low-level voice and music reproduction. Newly developed coupling system requires only 1¾" mounting depth, yet provides full response. 6¾x6⅛x1¾" deep. **Type IBR-A8.** For wide-area coverage using only a few speakers. All have 8 ohms impedance except those with *built-in line matching transformer for 70.7 and 25-volt systems. †indicates power handling capacity in watts. ‡swivel mounting, also fastens to ½" pipe. Av. shpg. wt., 5 lbs.

Stock No.	Mfr's Type	Fig.	†	Resp.	Dispersion	LxDia. In.	EACH
12 A 7504 X	IB-A8	G	30	250-13K	105°	‡9x10¼	23.97
12 A 7059 X	IB-T*	G	30	250-13K	105°	‡11½x10¼	30.60
12 A 7569	MIL-A8	G	10	350-13K	120°	‡6⅞x6⅞	19.77
12 A 7060 X	MIL-T*	G	10	350-13K	120°	‡10x7⅞	28.77
12 A 7398	DLC-8	H	7½	400-10K	120°	5⅞x4	11.97
12 A 7515 X	CIB-A8	J	30	250-13K	120°x60°	‡7⅜x14	28.17
12 A 7572	CMIL-A8	J	10	250-13K	120°x60°	‡6¼x9½	22.77
12 A 7061 X	CMIL-T*	J	10	250-13K	120°x60°	‡6¼x9½	30.90
12 A 7998 X	MLC	K	15	150-15K	120°	10⅝x12¾	40.95
12 A 7194 X	DW-30	L	30	100-13K	....	....	23.97
12 A 7516 X	IBR-A8	M	30	300-10K	360°	10¼x13	32.10

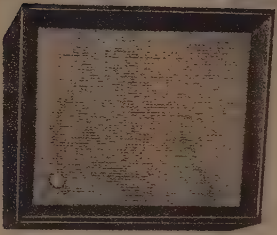
Paging/talk-back Speakers with deflector

Low as **26⁹⁷**

360° adjustable hood "directs" sound

Model UH-8. Special-design paging/talk-back speaker has variable dispersion for full control of sound pattern. 360° adjustable sound deflector increases sound in desired areas, diminishes it in other areas. Frequency response of 220-16,000 Hz for accurate reproduction of both voice and music. Power capacity, 32 watts. Impedance 8 ohms. 10½" dia. x 10⅞" (10¾" dia. x 14¹⁵⁄₁₆ with hood).
12 A 7940 X. Shpg. wt., 5 lbs.......................26.97
12 A 7938 X. Model UH-45. Above; 45 ohms....28.17
12 A 7939 X. UHT. 70.7, 25 V unit; taps. 6 lbs..35.37

Value-priced hi-impact Baffle with 8" Speaker

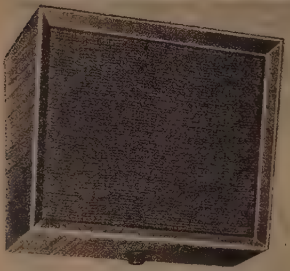


With Transformer

10.95

Model UL8AW. Low, low price for a complete speaker-baffle with L-pad volume control. Pre-wired, ready to hang on the wall to complete your music/paging system. Tough and attractive hi-impact styrene, with molded-in walnut-grain finish for long-lasting beauty. 8-ohm speaker has Alnico V magnet, screw terminals. Built-in 70.7-volt transformer has taps at 5, 2.5, 1.25, .62, .31 watts. Size, 9½x12x6".
12 A 7530 X. Shpg. wt., 3¼ lbs. 10.95

Model UL8BW. Same as above, but without transformer. Includes L-pad volume control.
12 A 7531 X. Shpg. wt., 3 lbs. 8.95



Tapered Baffle with 8" Speaker

Low as **13.95**

Walnut Finish, with L-Pad Volume Control

Wall-mounting speaker is tastefully designed to go well with any modern decor. Perfect for music or paging in the home or office. 8" speaker features smooth bass response, convenient L-pad volume control to adjust level at speaker as well as at amplifier. 8-ohm impedance. Highly efficient barium-ferrite magnet with 10-watt power handling capacity. Completely wired, easy to install. Rugged construction, with walnut finish. 9½x12x6".
12 A 7552 X. Shpg. wt., 5½ lbs. 13.95

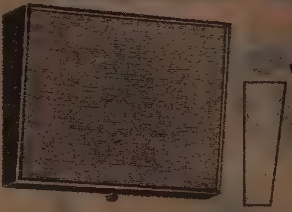
12 A 7553 X. As above, with 70.7 volt transformer tapped at 10, 5, 2.5, 1.25 and .62 watts. 6¼ lbs. 15.95

Space-saving thin Speakers

All have internal dust seals. Number in Mfr's Type indicates speaker diameter. PA8J speaker has Alnico V magnet, others have ceramic magnet. Impedance, 8 ohms. Screw terminals. Suffix "W" below indicates dual cones for wider frequency response.

Stock No.	Mfr's Type	Watts	Mag. Oz.	Depth In.	Wt., Lbs.	EACH 1-2	3-5	6-Up
12 A 7907	PA8ECS	8	3.0	1⅞	1½	5.37	5.10	4.83
12 A 7908	PA8FC	10	5.5	2¾	1¾	4.98	4.73	4.48
12 A 7909	PA8FC-W	10	5.5	2¾	1¾	5.28	5.02	4.75
12 A 7872	PA8HC	12	6.0	2⅞	2½	6.30	5.99	5.67
12 A 7873	PA8HC-W	12	6.0	2⅞	2½	6.75	6.41	6.08
12 A 7916	PA8J	15	6.8	4¹⁄₁₆	3	6.90	6.56	6.21
12 A 7874	PA8JC	15	10.0	3	3	6.90	6.56	6.21
12 A 7913	PA8JC-W	15	10.0	3	2¾	7.35	6.98	6.61
12 A 7914 X	PA12JC	18	10.0	4⁷⁄₁₆	4	8.97	8.52	8.07

Utah Baffles and Speakers

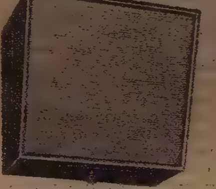


Extra-thin Baffles with 8" Speakers

Only 4" deep, yet provide all the rang and volume you nee for background mus and paging systems

8" shallow speaker has internal dust seal, barium-ferri magnet. 8 ohms. 9x12x4". With hardware. "T" suffix Mfr's Type indicates with 70.7 volt transformer, tapp at 5, 2.5, 1.25, .62, .31 watts. Transformerless types, watts peak. "V" suffix indicates with volume control.

Stock No.	Mfr's Type	Enclosure Finish	Wt., Lbs.	EAC
12 A 7869 X	TP8A-VT	Walnut-Finished Wood	4	15.9
12 A 7871 X	TP8D-T	Walnut-Finished Wood	4	14.5
12 A 7842 X	TP8B-V	Walnut-Finished Wood	3½	12.9
12 A 7870 X	TP8C	Walnut-Finished Wood	3¼	10.9
12 A 7581 X	TS8A-VT	Walnut-Textured Vinyl	3½	13.9
12 A 7013 X	TS8D-T	Walnut-Textured Vinyl	3½	11.9
12 A 7012 X	TS8B-V	Walnut-Textured Vinyl	3	10.9
12 A 7562 X	TS8C	Walnut-Textured Vinyl	3	9.9

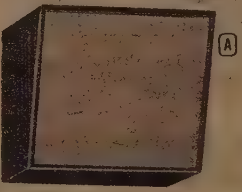


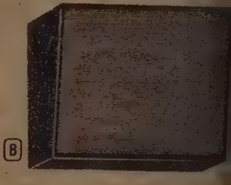
Stylish tapered Baffle with 8" Speaker

13.95 With Volume Control

Contemporary-styled Baffle with powerful 8" Speaker

For paging or background music. Speaker has 3-oz. hig efficiency ceramic magnet, 70.7-volt constant voltage tran former. Taps at 5, 2½, 1.25, .62, .31 watts. Built-in L-pa volume control. Screw terminals. Walnut-stained bir veneer. 9x11x5⅜" deep.
12 A 7878 X. Shpg. wt., 5 lbs. ....13.





A Sloping Baffle with 9-watt 8" Speaker

Designed for best dispersion angle. 8-ohm speaker h 1.47-oz. Alnico V magnet. Screw terminals. Covered wi durable walnut wood-grained fabric. Size, 9x11x6".
12 A 7091 X. Shpg. wt., 4 lbs. ....7.

B Low-cost Baffle for 8" Speaker

Perfect for economy PA and music systems. Birch venee walnut finish. 9x11x5⅝". Less speaker. With hardware.
12 A 7092 X. Shpg. wt., 3 lbs. ....5.

Low-cost line-to-voice-coil Transformers

Permit driving speakers at various power levels from sa 70.7 or 25-volt line. Select desired power tap on transform —does not affect other speakers in same system. Impe ance and wattage figures printed on coil. Solder termina 2" mounting centers except *2¾". Wt., 1 lb.

Stock No.	Watt Taps	Line Volts	Imp. Ohms	EACH 1-11	12-U
12 A 7088	5, 2.5, 1.25, .62, .31	70.7	8, 4	1.69	1.5
12 A 7821	10, 5, 2.5, 1.25, .62	70.7	16, 8, 4	1.99	1.8
12 A 7822	5, 2.5, 1.25, .62, .31	25	8, 4	1.79	1.6
12 A 7823	10, 5, 2.5, 1.25, .62*	25	16, 8, 4	2.49	2.2

PA components are available on convenient Credit Term

rgos decorator-styled Baffles and Outfits

affles with 8" or 12" Speakers installed

paging or background music. Walnut wood-
yl covering, screw terminals. "L" in Model No.,
'V", volume control; "T", 70.7-V transformer.
except 70.7-V types. **Series 108.** 8" speaker,
agnet, 6-watt capacity. **Series 408.** 8" speaker,
nagnet, 10-watt capacity. **Series 212.** 12" speak-
. magnet, 20-watt capacity.

k	Model	Baffle Size	Wt., Lbs.	EACH 1-5	EACH 6-Up
33 X	108CS	9½x12x4¼"	4	7.87	7.48
42 X	108CSV	9½x12x4¼"	5	9.90	9.41
44 X	408CS	9½x12x4¼"	5	9.85	9.36
50 X	408CSL	9½x12x4¼"	6	12.08	11.48
51 X	408CSLT	9½x12x4¼"	6	14.60	13.87
38 X	212CSL	13¾x16x6¼"	10	17.77	16.88

restige Baffles with 8" Speakers installed

08. Baffles with heavy-duty 8" speakers. 6-oz.
15-watt capacity. 8 ohms. "L", L-pad; "T",
ransformer. Walnut wood-veneer finish.

52 X	508CS	9¾x11x5⅜"	6	11.83	11.24
53 X	508CSL	9¾x11x5⅜"	7	14.06	13.36
54 X	508CSLT	9¾x11x5⅜"	7	16.67	15.84

C Wall-mount birch Baffles

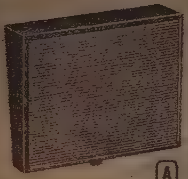
cane grille for smart appearance. Walnut
nhances any setting. Includes all necessary
g hardware. Less speaker; order from page 222.

	Model	Size	For	Wt., Lbs.	EACH 1-6	EACH 6-Up
3 X	DWB-8A	10½x9¾x6½"	8"	3¼	5.94	5.64
4 X	DWB-12A	14x13⅝x9⅛"	12"	5	8.32	7.90

D Slant-front corner-mount Baffles

"Clip-In" front. Mounting clips; screw termi-
coustic-padded bass reflex design. Cane grille;
grained vinyl. Less speaker; order from pg. 222.

0 X	SCB-8D	15x17¾x9"	8"	5¼	9.36	8.89
1 X	SCB-12D	20x20¾x10½"	12"	8	12.82	12.18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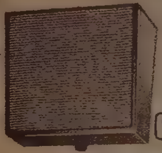
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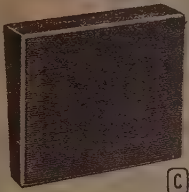
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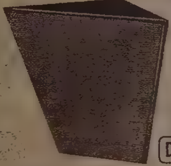

D

"Hallmark" Pager

Low as **14.06** Bi-directional Speaker

Model TCB-8S. Gives the same corridor paging coverage as two ordinary "single-faced" speakers. 8" dual cone speaker disperses plenty of clear sound in both directions. Provides coverage of extended hallway distances or factory areas.

Installation is simple . . no need to remove bracket for wall or ceiling mounting. With 4.8-oz. magnet. 10-watt power capacity. Deep-dusk walnut finish. 8 ohms. Size, 10¾x10¾x3½". Shpg. wt., 5½ lbs.

12 A 7521 X. 1-5. . . . . Each 14.80
6-Up. . . . . Each 14.06

undolier Ceiling Baffles and Enclosures for 8" speakers

E

F

G

H

J

Baffle. Flush-mounting louceiling baffle. Welded con-
n prevents vibration or rattle.
um finish. Fits 10¼" hole. 12"
e 95-8 enclosure. Wt., 2 lbs.
16 X. 1-4 Ea. 4.53 5-Up Ea. 3.98

Trim Ring Baffle. Highly pol-
l, simulated stainless, flush-
ng trim ring. Vibration- and
ee 20-gauge steel construction.
½" hole. 12¾" dia. Use 95-8
re. Wt., 1¾ lbs.
48 X. 1-4 Ea. 2.95 5-Up Ea. 2.59

G **68-8 Low-Ceiling Baffle.** Satin-brushed aluminum; fits 8½" hole; 12¾" dia. Use 95-8 encl. 1¼ lbs.
12 A 7547 X. 1-4 Ea. 6.93 5-Up Ea. 6.07

H **169-8 Square Baffle.** (Illus. with 193-8 encl.) 24-ga. steel; white; fits 9⅝" hole; 10½" square. 1 lb.
12 A 7554 X. 1-4 Ea. 2.37 5-Up Ea. 2.08

H **193-8 Enclosure.** (Illus. with 169-8 baffle.) Welded 20-gauge steel. 3¾x9⅝" square. Wt., 1¾ lbs.
12 A 7555. 1-4 Ea. 3.96 5-Up Ea. 3.47

J **51-8 Trim Ring Baffles.** Quick simple flush mounting. White 24-gauge steel. Fit 8½" diameter hole. 12¾" outer diameter. Use type 95-8 round enclosure below. Package of 5 baffles. Shpg. wt., 6¼ lbs.
12 A 7502 X. . . . . Pkg. of 5 for 7.95

95-8 Round Enclosure. (Not illus.) 20-gauge steel, for use with any round baffle shown above. Jute lining cuts resonance. Size, 4¼x9⅞" diam. 3 lbs.
12 A 7550 X. 1-4 Ea. 4.86
5-Up. . . . . Ea. 4.26

Soundolier Baffles complete with 8-inch Speakers

ssembled speaker-baffles consist of top
8-inch speaker and transformer, mounted
choice of above baffles. Packaged units
both money and time. Stripped leads and
ts make installation fast and easy.

rs have 3.16-oz. Alnico V magnet, handle
its. Frequency response, 40-15,000 Hz. Im-
e, 8 ohms. Maximum diameter, 8⅛"; depth,
lounted 70.7-volt transformer has taps for
2 and 4 watts. Color-coded leads.

Each model includes speaker and transformer described at left, mounted in baffle indicated. (Baffles also available separately, above.)

Stock No.	Model	Baffle Type	Wt., Lbs.	EACH 1-4	EACH 5-Up
12 A 7501 X	B67-8	67-8	4	11.49	10.89
12 A 7500 X	B61-8	61-8	4	9.94	8.56
12 A 7503 X	B68-8	68-8	4	12.89	11.59
12 A 7514 X	B169-8	169-8	4	9.21	8.43
12 A 7522 X	B51-8	51-8	3½	9.18	8.05

erchandise is available on Credit Terms—see page 438

SPECIAL PURCHASE

194
pieces
Tremendous Socket
and Tool Set Offer
39.99
$5
monthly*

Husky 194-piece professional-quality Socket Wrench and Tool Set

- Husky tools forged from tough alloy steel
- Sockets are protected with triple-plated chrome finish
- Set includes 50 sockets and accessories for every job

- Includes metric socket set for working on foreign cars
- Automotive ignition sets for complete ignition overhaul
- Large steel tool box with convenient removable tray

Pay less than 21¢ each for these finest-quality tools—the value of the year! With the correct tool on hand for every mechanical job, you'll find the job easier and faster to do, and you'll do it better! This professional-quality, low-cost 194-piece tool set offers the perfect selection of precisely-made tools for virtually any mechanical job requirements. *Alloy sockets and handles:* ½″ drive—ten sockets (7⁄16″ to 1″), ratchet, 19″ speeder, 5″ extension; ⅜″ drive—seven sockets (⅜″ to ¾″), ½″ to ⅜″ adapter; ¼″ drive—eight 6-point sockets (3⁄16″ to 7⁄16″), three 8-point sockets (¼″ to ⅜″), 6″ extension, 6″ flex handle. *Carbon sockets and tools:* ½″ drive—seven sockets (7⁄16″ to ⅞″),
"L" handle, metric drive—seven sockets (7mm to 14m
"L" handle; ¼″ drive—seven sockets (¼″ to ½″) v
"L" handle and rack; 13⁄16″ spark plug socket and
Other tools included: 5-piece open-end wrench set (5⁄16
¾″); 24-piece automotive ignition set; 8-piece igni
wrench set; 18-piece hex key set; hacksaw frame with
extra blades; 17-piece screwdriver set; 13-piece drill
⅜″ tempered steel cold chisel; 6″ combination plier; s
knife and five blades; fine and medium armature pa
for "turning" armatures. Rugged metal tool box with
tray holds complete socket and tool set.
26 A 2412 X. Shpg. wt. 30 lbs. .3

usky forged alloy steel Tool Sets

Complete quality-made 223-piece deluxe Socket and Tool Set

eatable value for mechanics and home
Includes 3 drive sets with thin-wall
plus many more necessary items.
tools have triple-plated mirror chrome
1/2" **Drive Set:** ratchet, 10", 5" exten.,
, spark plug skt., ten 12-pt. skts. (7/16"-
ee 6-pt. skts. (7/16"-9/16"). **3/8" Drive Set:**
2-pt. skts. (3/8"-3/4"), 8-pc. 3/8" deep skt.
"-13/16"), 13/4", 3" extensions, ratchet,
joint. **1/4" Drive Set:** Eight 6-pt. skts.
"), three 8-pt. skts. (1/4"-3/8"), flex
ratchet, 2", 6" extensions. Also in-
8-pc. metric skt. set (7 mm-14 mm); 8-pc. 1/2" drive hex skt. set (7/16"-7/8"); 5-pc. box end wrench set; 5-pc. open-end wrench set; 5-pc. comb. set; 24-pc. ignition wrench set; 8-pc. comb. ignition wrench set; hacksaw frame w/24 blades; 18-pc. hex key set; 10-pc. screwdriver set; 7-pc. nut runner set. Also, 6 fine and 6 extra-fine abrasive sheets; 5-pc. punch and chisel set; utility knife w/5 blades; grip wrench; 6" combination pliers; 20-pc. tap and die set; 6" adjustable open-end wrench; rugged 2-drawer steel tool chest with lid. Shpg. wt., 65 lbs.

26 A 2771 Z........................99.95

223 pieces

99.95

$5 monthly

see page 438

156-piece Tool Set featuring thin-wall sockets and mirror-chrome finish

ve Alloy-Steel Set: reversible ratchet,
ext., 13/16" spark plug skt., ten 12-pt.
/16-1"). **3/8" Drive Alloy-Steel Set:** seven
skts. (3/8-3/4"), 1/2-3/8" adapter. 1/2"
arbon Set: 7 skts. (7/16-7/8"), L handle.
e Carbon Set: 6 skts. (1/4-1/2"), L han-
k. **Other Tools:** 5-pc. open end wrench set (5/16-3/4"); 5-pc. punch, chisel set; 10-pc. screwdriver set; 18-pc. hex key set; hacksaw frame, 25 blades; 8-pc. ignition set; 24-pc. ignition set; metric set (7-14mm), L handle; fine and extra-fine ignition paper. Complete with metal case.

26 A 1414 X. Shpg. wt., 19½ lbs........49.95

Complete set

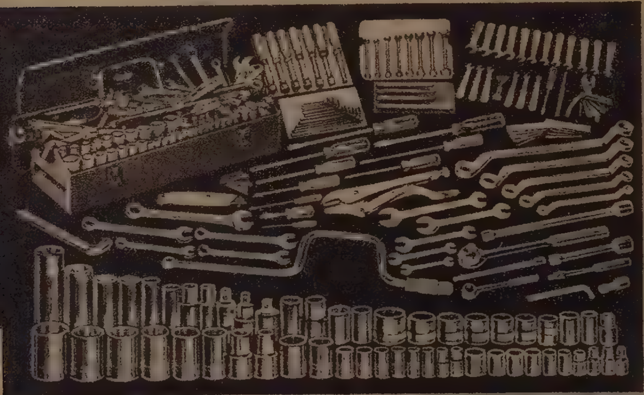
49.95 $5 monthly

see pg. 438

Husky 253-piece Socket and Tool Set

149.95 $8 monthly*

Versatile tool set will give you years of fine service. You get: ¼" drive—eight 6-pt. sockets (7/32x7/16"), three 8-pt. sockets (1/4-3/8"), 6 deep-wall sockets (1/4-7/16"), flex handle, ratchet, 2", 6" extensions, 6" spinner handle; ½" drive—5", 10" extensions, ratchet, speeder, spark-plug socket, thirteen 12-pt. sockets (7/16-1¼"), three 6-pt. sockets (7/16-9/16"), sliding T, 15" flex handles, universal joint; ⅜" drive—seven 12-pt. sockets (3/8-3/4"), 8 deep-wall sockets (3/8-3/16"), 1¾," 3", 6" extensions, universal joint, 16" speeder, 10" flex handle, ratchet; 8-pc. metric socket set (7mm-14mm), 8-pc. ½" hex drive set (7/16-7/8"), 6-pc. open-end wrench set
7/8"), 5-pc. box-end wrench set (3/8-7/8"), 5-pc. combina
wrench set (7/16-3/4"), 24-pc. ignition wrench set, 8-pc. c
bination ignition wrench set, 13-pc. drill set, hack
frame, 24 hacksaw blades, 18-pc. hex key set, 10-pc. scr
driver set, 7-pc. nut runner set, 12 abrasive sheets (6 f
6 extra-fine), 5-pc. punch and chisel set, utility knife w
5 blades, grip wrench, 6" combination pliers, 20-pc.
and die set, 6" adj. open-end wrench, 2-drawer tool ch
26 A 1708 Z. Shpg. wt., 75 lbs. 14



69.95 $5 monthly*

Husky 189-pc. fer
alloy-steel Tool

Tough, durable, quality-constructed, hi
versatile Husky tools. Include: ½" drive
12-pt. skts. (7/16-1"), extra-deep spark
skt., ratchet, speeder, 5" and 10" extensi
⅜" drive—seven 12-pt. skts. (3/8-3/4"), 8
deep skt. set (3/8-13/16"), 1/2-3/8" redu
adapter, 1¾" drive exten., universal jo
¼" drive—eight 6-pt. skts. (7/32-7/16"), th
8-pt. skts. (1/4-3/8"), flex hdle., 6" ext
ratchet. **Also:** 8-pc. hex skt. set (7/16-7/8")
pc. metric skt. set; 5-pc. comb. wrench
5-pc. open end and 5-pc. box-end wre
set; 24-pc. ignition set; 8-pc. ignition wre
set; hacksaw frame, 24 blades; 18-pc. hex
set; 10-pc. screwdriver set; 7-pc. nut ru
set; 6 fine, 6 extra-fine abrasives; 5-pc. pu
chisel set; knife w/5 blades; grip wren
tool box, tray. Shpg. wt., 54 lbs.
26 C 2781 Z. 6

34.95 $5 monthly*

Husky 55-piec
Metric Tool S

Well-designed, rugged, long-wearing tool
Includes: ⅜" drive—3", 6" socket extensi
reversible ratchet; ⅜" **drive metric socke**
9mm, 10mm, 11mm, 12mm, 13mm, 14m
15mm, 17mm, 19mm; spark-plug soc
metric combination wrenches—9mm, 10m
11mm, 12mm, 13mm, 14mm, 15mm, 17m
19mm; 7-pc. metric hex key wrench set,
pc. screwdrive set, hacksaw frame and bla
12 hacksaw blades, offset screwdriver;
Shpg. wt., 15 lbs.
26 A 1709 X. 3

**Buy your tool set with no money down . . see page 4*

acuum Cleaners . . extra power for big jobs

hop Vac" all-purpose vacuum cleaners

heavy-duty motor and
ife construction

Low as 26^{95} $5 monthly*

Gallon 1-hp Model. Makes short work of the rough clean-
jobs that would ruin an ordinary vacuum cleaner. Large
zle picks up sawdust, chips, sticks, stones. Attaches to
tools for chip removal. Oversize 2½" diameter hose,
red to 1¼" for most home vacuums. Drum is easily
ed by unclamping top. Has carrying handle, 6-ft. hose,
notor, two-wire cord, 2½" to 1¼" adapter. Drum is fin-
in glossy gold-color enamel. 19" high, 15" diameter. U.L.
. For 110-120 volts, 50-60 Hz AC.
101 X. Shpg. wt., 20 lbs. 29.95

on 1-hp Model. Above with drum 18" high, 12" diameter.
515 X. Shpg. wt., 15½ lbs. 26.95

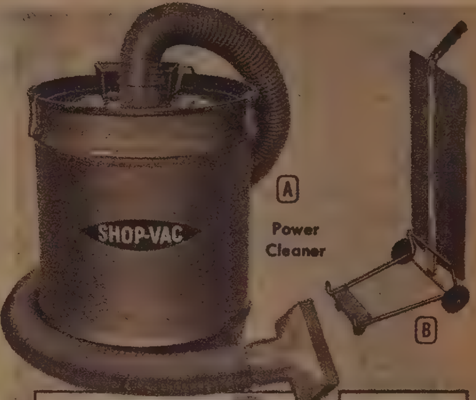
c-Carts. Rolls vacuum to job; no stooping or lifting.
th accessory bag.
257 X. For 5-Gallon Vacuum. Shpg. wt., 6½ lbs. 10.95
258 X. For 10-Gallon Vacuum. Shpg. wt., 6½ lbs. . . . 10.95

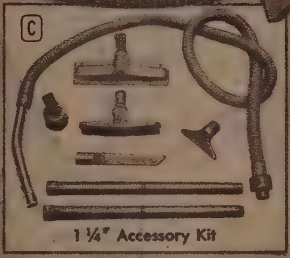
" Accessory Kit. Includes 10" floor nozzle, round brush,
nozzle, crevice tool, 6' hose, two 20" extension tubes,
ozzle and brush, conversion coupler for Shop-Vac.
250 X. Shpg. wt., 4 lbs. 19.50

" Accessory Kit. Extra-long 14" floor nozzle with brush,
23" extension handles, coupler for other cleaners.
103 X. Shpg. wt., 3 lbs. 9.95

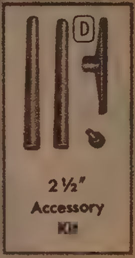
Four Casters for Above Cleaners.
104 X. For 5-Gallon Vacuum. Shpg. wt., 1¾ lbs. 3.39
105 X. For 10-Gallon Vacuum. Shpg. wt., 1¾ lbs. 3.39

636 X. 6' Hose Extension. Shpg. wt., 1½ lbs. 6.95
637. Crevice Tool. Shpg. wt., 8 oz. 3.75
638. Paper Filter Bags. Shpg. wt., 4 oz. . . . . . Pkg. of 5/98¢





1¼" Accessory Kit



2½" Accessory Kit

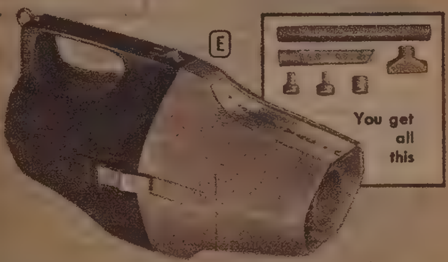
o-Vac powerful portable gobbles up dirt

lly-designed dual filters
eanest possible air exhaust

32^{95} $5 monthly*

nd Vacuum. Power with lightweight portability (6 lbs).
uble pickup-power of hand vacuums—holds three times
Picks up all kinds ot dirt and debris. With 18-ft. cord,
o 1¼" adapter, 2½" to 2½" coupling, 6" rectangular
and brush. 2½x14" crevice tool. two 2½x23" extension
36"x2½" hose, adjustable shoulder strap. For 120VAC/
rder accessories below.
670. Shpg. wt., 12 lbs. 32.95
671. 14-inch Floor Nozzle. Shpg. wt., 1 lb. 4.95
672. Fishtail Nozzle. Shpg. wt., ½ lb. 2.95
674. Paper Filter Bags. Shpg. wt., ½ lb. . . . Pkg. of 5/85¢
675. Cloth Filter Bag. Shpg. wt., ½ lb. 1.19

HIPPO-VAC by Shop-Vac



W-r-VAC does jobs house vacuums can't

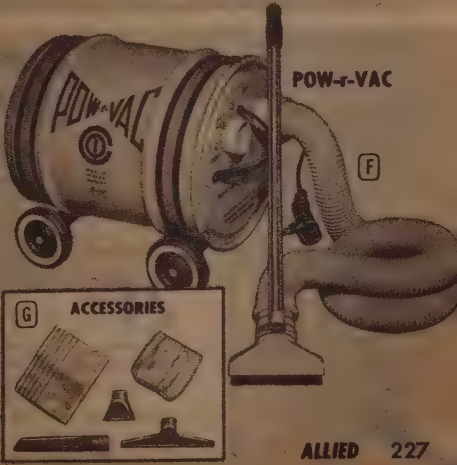
heels roll over cracks, bumps,
n surfaces without balking

32^{95} $5 monthly*

Gallon, 4/5-hp Model. Versatile vacuum rides on wheels
easy portability, or stands on end for stationary jobs.
-gauge 15" high, 12" diameter steel drum handsomely
ed in avocado with wood-grain trim. Clamp-on cover holds
releases easily. Full-length clamp-on handle makes stand-
bs easy and comfortable. Big 6-foot hose carries large
without clogging. Can also be used as powerful blower.
adapter for household vacuum accessories; cloth filter
lus two paper bags. For 110-120 VAC/DC.
546 X. Shpg. wt., 19 lbs. 32.95
llon, 1½-hp Model. Above with drum 16" high, 14" diam.
547 X. Shpg. wt., 26 lbs. 39.95

cessories for special cleaning jobs—fits 2½" hose.
A 1548. 14-inch Floor Nozzle with Brush. Wt., 1 lb. 4.50
550. Fishtail Nozzle. Shpg. wt., 1 lb. 2.75
549. Large Crevice Tool. Shpg. wt., 1 lb. 2.75
552. Paper Filter Bags. Wt., 1 lb. . . . . Pkg. of 6/85¢
551. Cloth Filter Bag. Shpg. wt., 1 lb. 1.10

POW-r-VAC

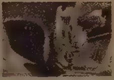


money down . . see page 438

Reversible Drive-R-Drill . . the home worksho

Drills Tile

Re-threads

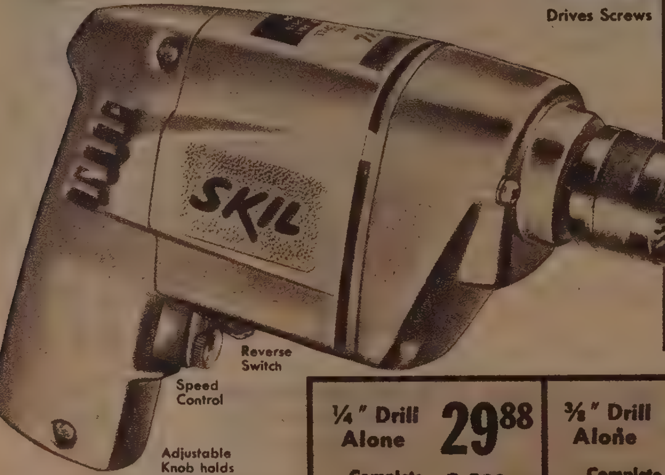

Assembles

Polishes Car

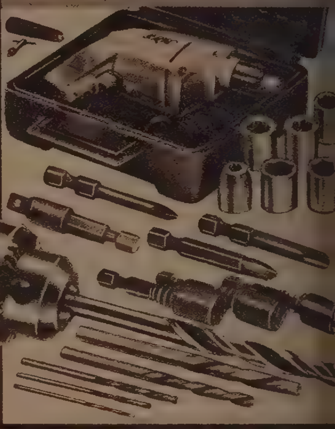
Sands Wood

Drives Screws

SKIL



Save $8.45 on Drive-R-Drill, 18-pc. Accessory Outfit and Case . . grea value for the home mechanic



¼" Drill Alone	29.88	⅜" Drill Alone	36.88	½" Drill Alone	39.88
Complete Outfit	34.88	Complete Outfit	41.88	Complete Outfit	44.88

Skil Drive-R-Drill offers reversible variable speed, trigger controlled

Remarkable Drive-R-Drill with Trigger Speed Control and special accessory kit is much more than a drill. Operating in forward or reverse at any speed up to 2000 rpm, it's a power drill, a power wrench, an electric screwdriver, a sander, and a buffer. You can drill a hole in metal, thread the hole, drive a bolt in, and tighten a nut on the bolt, all with the same tool. You can drill in any material, even glass; tighten or remove nuts and bolts; drive or remove screws; polish, sand, grind, and do hundreds of other jobs. So lightweight and compact, handling it is a breeze. ¼" drill has 2.5-amp motor; ⅜" and ½" drills have 3-amp motor. Speed ranges: ¼"—0-2000 rpm; ⅜"—0-1000 rpm; ½"—0-750 rpm. 6-ft. 3-wire cord and plug. Less bit. Ou include 6 screwdriver bits, 7 nut driver bits and 5 drill in fitted case. U.L. Listed. 115 V, 50-60 Hz AC.

26 A 1206 X. ¼" Drill Outfit. Shpg. wt., 6 lbs. 34

26 A 1210 X. ⅜" Drill Outfit. Shpg. wt., 6½ lbs. 4

26 A 1216 X. ½" Drill Outfit. Shpg. wt., 6½ lbs. 4

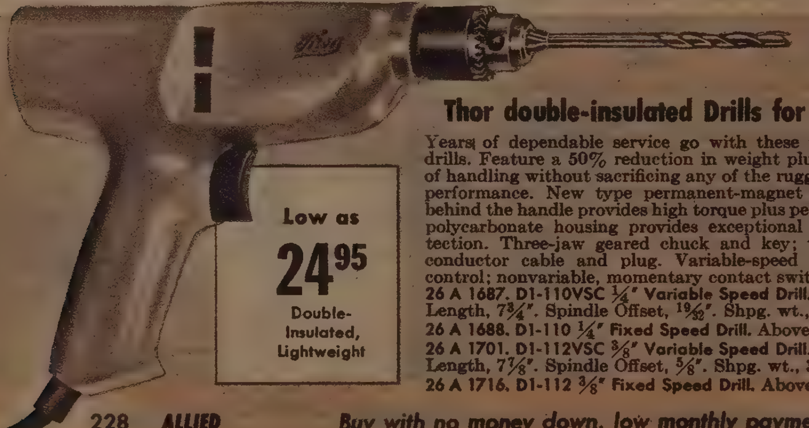
26 A 1192. ¼" Drill Alone. Shpg. wt., 4 lbs. 29

26 A 1194. ⅜" Drill Alone. Shpg. wt., 4½ lbs. 36

26 A 1201. ½" Drill Alone. Shpg. wt., 4½ lbs. 39

26 A 3115. Drill Case Alone. Shpg. wt., 1 lb. . . . .

26 A 3116. Accessory Outfit Alone. Shpg. wt., 1 lb. . . . . .



Low as 24.95
Double-Insulated, Lightweight

THOR

Thor double-insulated Drills for every applicatio

Years of dependable service go with these tough and durable po drills. Feature a 50% reduction in weight plus compact design for e of handling without sacrificing any of the rugged power and outstand performance. New type permanent-magnet motor placed above behind the handle provides high torque plus perfect balance. High-imp polycarbonate housing provides exceptional durability and good tection. Three-jaw geared chuck and key; trigger control; 7-ft. conductor cable and plug. Variable-speed drills have trigger sp control; nonvariable, momentary contact switch.

26 A 1687. D1-110VSC ¼" Variable Speed Drill. Speed, 0-2000 rpm. Length, 7¾". Spindle Offset, $^{19}/_{32}$". Shpg. wt., 2¾ lbs. 3

26 A 1688. D1-110 ¼" Fixed Speed Drill. Above, but nonvariable. . . .2

26 A 1701. D1-112VSC ⅜" Variable Speed Drill. Speed, 0-1200 rpm. Length, 7⅞". Spindle Offset, ⅝". Shpg. wt., 3 lbs. 3

26 A 1716. D1-112 ⅜" Fixed Speed Drill. Above, but nonvariable. . .2

or hobbyist, there's a Drill here for you

Decker 14-piece Handyman's Outfit

apacity ⅜" power Drill
⅜" steel, ¾" hardwood
custom-molded carrying case

19.99

s Model U-124 ⅜" drill with rugged double-
n gears. 1000 rpm (no load). 1/7-hp motor
amps. 8½" long. Outfit includes wheel
" coarse wire-brush, three 5" abrasive discs,
⁄8", ³⁄₁₆", ¼"), chuck-key, holder, 3" cotton
wheel, 5" rubber backing pad, luggage-look
L. Listed. 115 VAC.
8. Shpg. wt., 3¾ lbs. 19.99
4. **Drill Alone.** Shpg. wt., 2½ lbs. 13.95

000 ¼" **Drill.** Trigger lock. ¼" steel, ½"
/7-hp, 1.9 amps. 2250 rpm. 115 VAC.
2. Shpg. wt., 3¼ lbs. 8.88

9-piece variable-speed Shop Outfit

plete workshop in one outfit
inuously variable speed
ision ball-bearing construction

39.95

value for the home mechanic! Gives you the
ty of a complete power shop with sander-
rinder all in one outfit. Includes Thor
/SC drill with continuously variable speed
1200 rpm; plus 7 drill bits (¹⁄₁₆ to ⅜"); 21
sanding discs; 5" rubber backing pad; 5¼"
g bonnet; adapter hardware; 3" wire brush;
ding wheel; 3" muslin buff; 2-piece steel
-piece ¼" shank arbor; chuck key. Entire
tfit is housed in an attractive plastic case.
6-ft. 2-wire cord. U.L. Listed and C.S.A.
d. For 117 VAC. *See facing Page for Listing Alone.* Shpg. wt., 18 lbs.
6. . . . . .39.95

33.95

36.99

Black & Decker reversing variable-speed Drills

insulated variable-speed reversing
th controlled power you can de-
at any speed from the lowest to
hest. Permits proper speed for
terial drilled. Just squeeze trigger
speed from 0 to full. Flick switch
rse direction. Rugged double-
d construction with nylon housing
imum safety. Infinite speed lock.
ord plug. Long-life roller bear-
ss bit. 115 VAC.

l 7050 ¼" **Drill.** Drills ¼" steel,
hardwood. ¼-hp motor rated 3.5
speed Range, 0-2250 rpm.
59. Shpg. wt., 4 lbs. 33.95

l 7150 ⅜" **Drill.** ⅜" steel, ¾"
. ¼-hp, 3.5 amps. 0-1000 rpm.
0. Shpg. wt., 5 lbs. 36.99

Wen four-speed reversible ½" Drill Outfit

- Split-second speed change
- Powerful ½-hp motor
- With case and drill bits

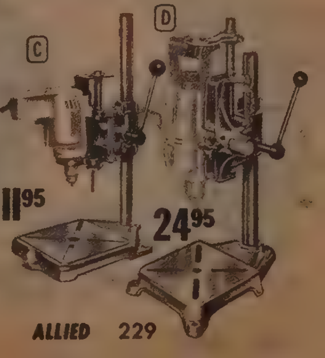
Model 950. Complete outfit with reversible drill for heavy-duty work. Gives the right speed for every job, in either direction. Operates at 630, 730, 2200, 2400 rpm (no load). Double-switch reverse, locking trigger-switch. Powerful ½-hp, 6-amp motor has double-reduction gears. 11" long. 6-ft. 3-wire cord. Carrying case and 5 bits (¼-½"). U.L. Listed. 115 VAC.
26 A 1233 X. Shpg. wt., 12 lbs. 43.33
26 A 2822 X. Drill Alone. 9 lbs. 38.88

Drill Alone
38.88
Outfit
43.33

Stands for Radial Drill Press

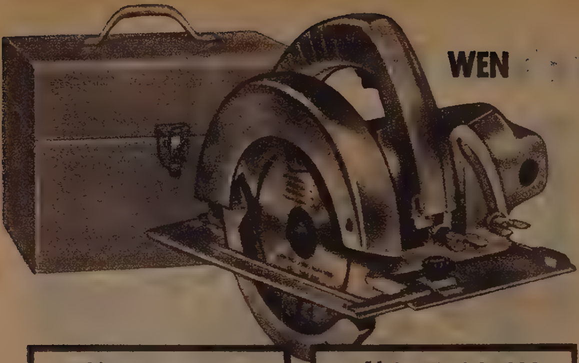
C **Thor 580 Drill Stand.** Converts electric drill to lever-operated drill press. Holds ¼" and ⅜" drills. Height, 18". 3" maximum feed. 3" chuck to column. Rack and pinion feed.
26 A 1226 X. Shpg. wt., 7 lbs. 11.95

D **Thor 585 Drill Stand.** Heavier construction for heavy-duty model. Easily handles ½" and ⅝" drills. Height, 20½". 2¾" maximum feed. 6" chuck to column. 7½" square base. Shpg. wt., 15 lbs.
26 A 1227 X. 24.95



11.95

24.95



WEN

Circular Saw values for homeowner or "pro"

1¾ hp Model 960	
With case, 2 blades	Saw alone, 1 blade
46^{99}	36^{88}

2½ hp Model 1000	
With case, 2 blades	Saw alone, 1 blade
59^{95}	49^{95}

Builder's 7¼" heavy-duty Saws

Model 960. Boasts powerful 1¾ hp, 10-amp mo to give no-load speed of 5200 rpm. Cuts to 2½" 90°, 1⅞" at 45°. Life-time lubricated sleeve a needle bearings, heavy-duty gears, heavy basepla chip ejector port. Depth, bevel controls, rip gui removable shoe extension. 110-120 VAC, 3-w cord. Two 7¼" blades, wrench, case. U.L. Listed
26 A 0023 L3X. With Case. Wt., 17 lbs..........46
26 A 2394 X. Saw Alone, 1 Blade. 15¼ lbs......36

Model 1000. Powerful contractor's model, has hp, 12-amp motor for 5340 rpm no-load spe Permanently lubricated ball and needle bearin Extra-heavy base plate, auxiliary knob. Depth a bevel controls, rip guide, removable shoe extensi 110-120 VAC. With two 7¼" combination blad wrench, steel case. U.L. Listed. Shpg. wt., 17
26 A 0022 L3X. With Case..................59
26 A 1433 X. Saw Alone. 1 Blade. 15½ lbs......49

SKIL

Professional quality for finest performance

79^{95}

29^{88}

26

A 7¼" Saw with 2 hp motor

Model 553. Rugged and dependable, powerful enough for the toughest jobs, ideal for everyday professional use. Sturdy 2 hp, 12-amp motor produces no-load speeds up to 5200 rpm. Depth of cuts to 2⅜" at 90°, 1⅞" at 45°. Built-in safety clutch protects blade and motor. Heavy-duty quadrant and ribbed shoe for rigidity, accuracy. Spring-loaded blade guard protects blade when not in use, automatically exposes blade when saw is in use. Sawdust ejector. For 115 VAC. With blade, wrench. Shpg. wt., 16 lbs.
26 A 1442 X..............................79.95

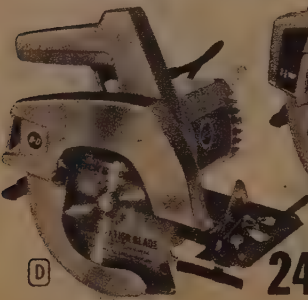
B 7¼" Saw with 1½ hp motor

Model 574. Super value 1½ hp, 7¼" homeowner's saw is ideal for those weekend projects. So powerful it even cuts through soft metal. Heavy-duty burn-out protected motor rated at 10 amps, provides speeds up to 5200 rpm, no-load. Cuts to a depth of 2⅜" at 90°, 1⅞" at 45°. Safety stop brushes, anti-friction bearings. Vari-Torque clutch protects blade motor. Sawdust ejector. Spring-loaded blade guard to protect blade when saw is not in use. 9½" long. For 115 VAC. 3-wire cord. U.L. Blade, wrench. Shpg. wt., 12½ lbs.
26 A 3019 X..............................29.88

C Homeowner's Saws

Model 533. Perfect for any remodeli or repair job. Rugged ¾ hp, 5.5-a motor for no-load speed of 3950 rp Uses 5½" blades. Depth and be controls; high torque gears. Maxim cut: 1¾" at 90°, 1$\frac{13}{32}$" at 45°. round arbor. For 115 VAC. 3-w cord. Blade, wrench. Shpg. wt., 9
26 A 1437 X.........................26
26 A 1449 X. Model 536. As above, 6½" blade. 9-amp, 1¼ hp mo Blade, wrench. 11¾ lbs..........36
26 A 1208 X. Model 537. 7¼" bl 10-amp, 1½ hp motor for extra cap ity. Blade, wrench. 12½ lbs.....42

BLACK & DECKER



24^{88}

34^{95}

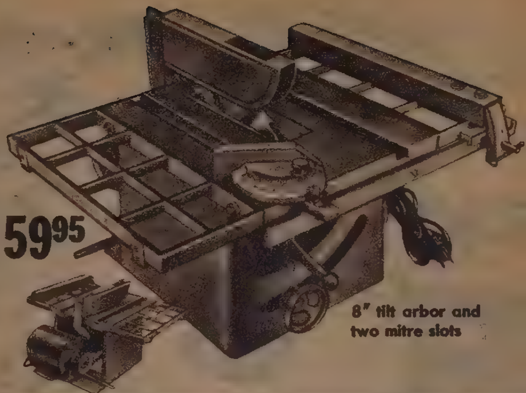
7¼" Saws with 1 hp to 1½ hp motors

D **Model 7301.** Tackles a variety of jobs with ea Powerful 9-amp, 1hp motor delivers 4400 rpm load speed. Takes either 6¼" or 7¼" blades. Cutti depth: 2⅜" at 90°, 1⅞" at 45°. Calibrated rip fen bevel and depth adjustments. Non-binding telesc ing blade guard. 3-wire cord. For 110-120 VA With 7¼" combination blade and wrench. U. Listed. Shpg. wt., 16 lbs.
26 A 3610 X..............................24.

E **Model U-131.** Powerful 1¼ hp motor for ext cutting capacity. Rated 9-amps, 4400 rpm load speed. Cord protector in handle keeps from interfering with work. Maximum cut: 2⅜" 90°, 1⅞" at 45°. For 7¼" or 6½" blades. 3-wire. 1 120 VAC. 7¼" blade, wrench. U.L. Wt., 13½ lb
26 A 1451 X..............................34.
26 A 1432 X. Model 231. As above, but 1½ hp, 9 amp motor. With 7¼" blade, wrench. 14⅜ lbs. 44.

Equip your shop now with quality tools from Alli

Fast-cutting Jigsaws for home or on-the-job



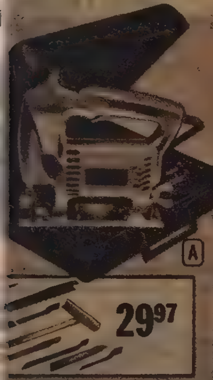
5995

8″ tilt arbor and two mitre slots

MT Tilt Arbor Saw develops 1 full hp

2164MXE. The perfect addition to your shop—this le precision table saw crosscuts, rips, bevels, cuts und angles, mitres, makes dadoes, mouldings, coves. t for precise woodworking and cabinetmaking. Solid- l 10½x13″ cast iron table has two precision mitre slots, one each side of blade, for maximum flexibility num depth of cut: 2¼″. Blade tilts to 45° with easy- control mounted on front. Ball bearing G.E. motor ps one full hp. Precision depth and angle controls. ete with 8″ blade, rip fence, blade guard. 10″ table ions to support oversize work. For 115 V, 60 Hz AC. wt., 44 lbs.

430 U. 59.95



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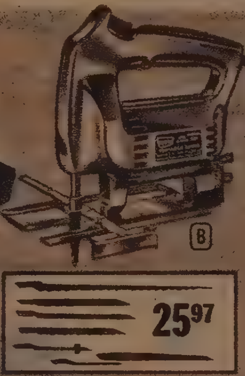

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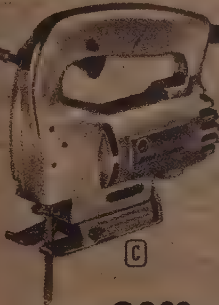
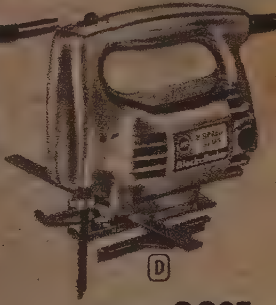


¼-hp motor .. cuts tile 2999



1/7-hp motor .. big value 2295

Wen versatile Jigsaw Outfits

2-Speed Jigsaw. Flick the switch to low for starting utting metals; switch to high for fast cutting of wood, s, etc. Cuts 6″ logs, 6x6's, 4x4's at 45°; metals to ½″; o 2″. Starts inside cuts. Adjustable shoe. ½ hp, 4- notor; 2400 or 2800 one-inch strokes per minute. U.L. . For 115 VAC. With seven blades, carrying and e case. Shpg. wt., 6½ lbs.

021 L2X. 29.97
420 X. Saw Alone. With 7 blades. Wt., 5 lbs. . . .26.97

Variable Speed Jigsaw. Thumb control gives exact ed and torque control from 0-2800 one-inch strokes/ s. Adjustable shoe, ½ hp motor. Cuts 6x6 wood, ½″ 2″ pipe. U.L. 115 VAC. 7 blades. Shpg. wt., 5 lbs.

426 X. 25.97

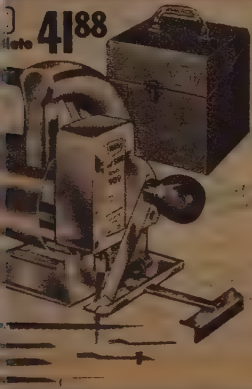
Black & Decker multi-purpose Jigsaws

C **Model U-255S Deluxe 2-speed Jigsaw.** Versatile jigsaw lets you select high speed of 3000 strokes per minute for wood, plastics, etc., or low speed of 2500 strokes per minute for soft metal. Cuts hardwood up to 1″ thick, soft wood up to 2″. Cuts tile. Rugged ¼ hp motor is rated 2.5 amps. Stroke length, ⅝″. With woodcutting blade, blade pouch. 115 VAC. U.L. Listed. Shpg. wt., 5¾ lbs.

26 A 3606. . . . . .29.99
26 A 1539 X. Model 7561 Variable Speed Jigsaw. Similar to above, but variable speed. 6 extra blades. Wt., 5¾ lbs. 44.95

D **Model U-155 2-Speed Jigsaw.** Similar to U-255S but 1/7 hp. Less tile-cutting feature. Rip fence, 2 blades, pouch. 115 VAC. U.L. Shpg. wt., 4¼ lbs.

26 A 1540 X. 22.95



lete 4188

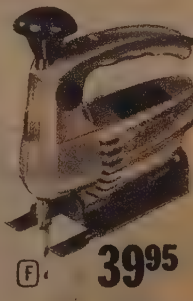
High-speed Saws for home or shop

E **Wen 909D.** Fast-cutting ½ hp jigsaw does the work of a whole shop full of standard saws. Cuts wood 6x6's, metal to ½″ and pipe to 2″. Makes its own starting hole—cuts straight or curved lines, angles. Powerful 6-amp motor drives blade at 3400 or 2400 one-inch strokes per minute. Fan keeps rip guide clean. Rip fence, circle guide, 7 blades. U.L. Listed. 115 VAC. Shpg. wt., 10 lbs.

26 A 0024 L2X. With Steel Case. .41.88
26 A 2373 X. Saw Alone. With 7 blades. Wt., 9 lbs. . . .36.88

F **Thor 911 Roto-Blade Speedsaw.** Unique speedsaw cuts scrolls, tight curves by simply twisting knob to change direction. Fingertip power steering lets you cut in any direction—or lock blade in position. Cuts wood up to 2″ thick, steel up to ⅛″. Angle of cut adjustable to 45°. 3400 ⅝″ strokes per minute. With 2 wood blades. 3-wire cord. For 115 VAC. Shpg. wt., 5 lbs.

26 A 1458 X. 39.95



3995

Buy any tool on these two pages for only $5 monthly .. see page 438

Big-value Electric Sanders

With Case 43^{33}

Tool Alone 38^{88}

Burnoutproof Wen dual-speed 7″ Sander/Polisher

Model 940. Ideally suited for home or shop use. Powerful ½-hp, 6-amp, dual-speed motor features burnout-proof armature. Lightweight, perfectly balanced design for quick work on metal, wood or plastic . . professional results on automobile sanding, paint removal. Large wool bonnets for waxing and polishing floors, cars, furniture. Designed for fast, efficient operation. 940 electronically switches to 3400 rpm for sanding, 1800 rpm for polishing and buffing. Rugged needle-point bearings and all-gear construction. Auxiliary handle mounts on either side for added convenience. Overall size, 14x6½x3½″. U.L. and C.S.A. Listed. 6-ft., 3-wire cord. Outfit includes: two sanding discs, polishing bonnet, husky steel carrying case. For 117 VAC.

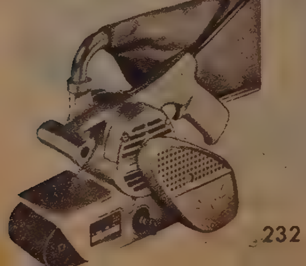
26 A 0019 L2U. Outfit with case. Shpg. wt., 12 lbs. 43.33
26 A 2406. Outfit without Case. Shpg. wt., 8½ lbs. 38.88

49^{95} Black & Decker 3x24-in. Belt Sanders 59^{95}

Model U-144 One-Speed. Compact gear-driven sander goes into tight areas, gives smooth professional finish. Has ⅝ hp, 5.2 amp motor between pulleys—no tilting or rocking. Belt moves at 1200 sq. ft./minute for fast operation; 13.8 sq. in. sanding area. Front controls for easy belt installation. For 117 VAC. Accepts dust bag at right. Shpg. wt., 10¾ lbs.
26 A 3645 X. 49.95

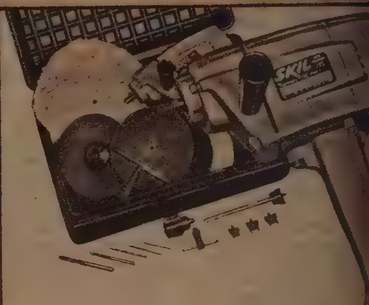
Model U-244 Two-Speed. Choose the right speed for every job—1250 sq. ft./minute for fast material removal, or 1050 sq. ft./minute for smoother finish. Has ¾ hp, 5.7 amp motor. For 117 VAC.
26 A 3646 X. Wt., 10¾ lbs. . . .59.95

Zippered Dust Bag and Housing. For U-144 and U-244 sanders. Powered by sander motor. Wt., 2 lbs.
26 A 3611 . . . . .7.95



59^{88} Skil dustless 3″ Belt Sander

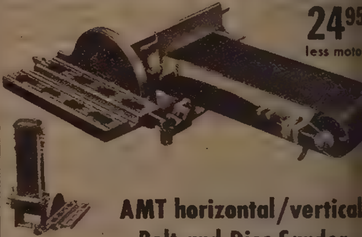
Model 595. Sands flush to any surface. Fan-driven dust pick-up. Self tensioning mechanism for easy belt changes. Control knob centers belt on pulleys. Bronze bearings, precision cut gears with cog belt drive. Universal 5.5-amp motor. No load speed, 925′/minute. With sanding belt. For 117 VAC.
26 A 1416 X. Shpg. wt., 12 lbs. . .59.88



Outfit 39^{88}

Skil 6″ Polisher Sander-Drill Outfit

Model 120-1 Outfit. Includes Model 12 polisher/sander with bonnet, rubbe backing pad, 3 sanding discs, wrench, re movable side handle. 2000 rpm, 2.5 am ⅓-hp motor. Outfit also includes: ¼″ dri chuck, key, 5 drill bits (1/16-¼″), 5-p auger bit set for holes to 1″ in wood, carry ing case. For 117 VAC.
26 A 1558. Outfit. Wt., 8 lbs. 39.8
26 A 1559. Model 120 Polisher/Sande Alone. Less drill access. 5 lbs. 29.8

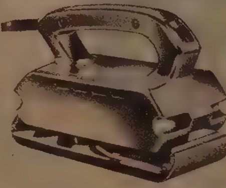


24^{95} less moto

AMT horizontal/vertica Belt and Disc Sander

Model 271. Rugged belt sander operate horizontally or vertically; unique track tension adjustment. Disc sander tabl tilts to 45°. Drive spindle for ¼″ tools 117 VAC. Motor sold separately below
26 A 1282 X. Shpg. wt., 17 lbs. 24.9

26 A 3274 X. G.E. Motor. For above. De velops 1 hp. 1750 rpm. 117 VAC. Shpg wt., 17 lbs. 22.9



Wen in-line Vibrator Sander

10^{95}

Model 310. Fast removal, smooth finishing. Straight-line action of 7200 3/16 strokes/minute with 26 sq. in. sandin area. Solid-state control. No whip o bounce. 7½x3⅝x4¾″. For 117 VAC.
26 A 3644. Shpg. wt., 4 lbs. 10.9

Professional-quality Electric Power Tools

ckwell ½-hp Router
h ball bearing motor **49^99**

el 645. Compact, lightweight . . with knobs for positive control. Double lated for safety and endurance. Has p, 28,000 rpm motor; depth control; collet. With bit for slotting, grooving; for corner routing; bit for rabbeting tep-cutting. Adjustable edge guide, ruction book. 117 VAC.
1052 X. Shpg. wt., 10 lbs. 49.99

il Router
th precise
th control

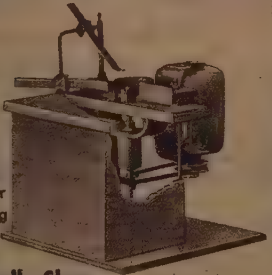
4^88

bearing
p motor
,000 rpm
ad speed

el 548. Versatile power router offers ise performance. Calibrated to 1/32 of nch. Helical groove permits quick and rate depth adjustments. Built-in dle lock for easy bit change. ⅓ hp, 00 rpm, 3.7 amp. motor. ¼″ collet. h eye shield. Base plate 5⅝″ diameter. ght 6″. 115 V, 60 Hz AC.
1377 X. Shpg. wt., 6 lbs. 34.88

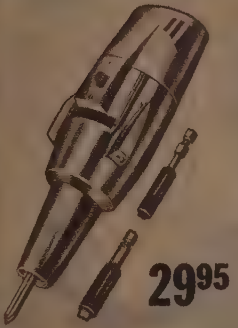
95 less motor

the
essional
enter or
dworking
byist



T Spindle Shaper

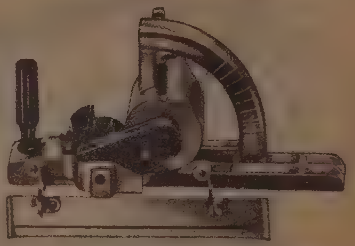
del 252. Makes decorator edges, beads, es, moldings, tongue-in-groove joints more. Fully adjustable, takes ½″ e cutters. Sealed ball bearings. With ns for construction of wood table and e. Order motor below.
A 1056 X. Shpg. wt., 9 lbs. 14.95
A 3274 X. AC Motor. Wt., 17 lbs. . 22.95



29^95

Electric reversible Screwdriver by Shopmate

Model 1895. Zips screws in or out with ease, using high-torque 100:1 gear reduction. Drives both slotted and Phillips head screws. Fan-cooled "Lifeweld" 3-amp motor with clutch action. Ball thrust and self-lubricating bronze bearings. On-off and reversing switches. No-load speed, 325 rpm. Accepts any ¼″ hex shank bit. 8½″ long. Includes 2 slotted bits with "head finders" and Phillips bit. 3-wire cord and plug. U.L. Listed. For 117 VAC. Shpg. wt., 3¼ lbs.
26 A 1200 . . . . 29.95



- For bevel or surface planing
- Rugged ½-hp motor

32^97

Wen Power Planer . . heavy-duty design

Model 930. For professional edges, surfaces and miters. Burnoutproof, 6-amp motor. Two replaceable cutters are separately adjustable; cut a path to 2⅛″ wide, 1/16″ deep. Miter guide adjusts to 45°; removes for surface planing. 16″ shoe for flatter, more accurate work. No-load speed, 14,500 rpm. Bronze bearings and welded steel armature. Airstream chip ejector. Lightweight aluminum housing. 7½x7x16″. U.L. and C.S.A. Listed. 117 VAC. Wt., 9¾ lbs.
26 A 2091 X 32.97

44^95

Wen 6″ Bench Grinder Outfit

Model 1030. Has shaded-pole 8.5-amp, ⅓ hp motor. Twin 6″ wheels turn at 3450 rpm. Adjustable tool rests, eye shields, spark arrestors. With fine, coarse wheels; wire, buffing wheels; suction cup feet; 2 dust bags; lamp. 15x5¾x9½″. 117 VAC.
26 A 1058 X. Kit. 20 lbs. 44.95
26 A 1059 X. Grinder Alone. With coarse, fine wheels. 16 lbs. . . 39.95

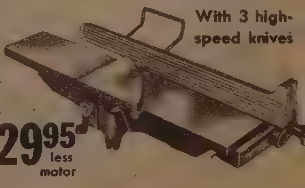
AMT 4″ Jointer-Planer

Model 2432. Built to make accurate glue joints, rabbet cuts to ⅜″, tapper and bevel cuts. Precision-ground table adjusts for cut depth; fence adjusts to 50°. Twin balanced heads, 3 high-speed knives. Order motor separately below. 22″ long. Shpg. wt., 19 lbs.
26 A 1057 X 29.95
26 A 3274 X. AC Motor. 17 lbs. 22.95

29^95

Thor 6″ Wheel Grinder

Model 928. Low-cost speed grinder performs all grinding, buffing, wire brushing operations. Ideal for home, bench or professional shop. Self-aligning oil-less bronze bearings. 115 V, 60 Hz AC ¼-hp shaded pole motor. 3450 rpm speed. With eye shields, adjustable tool rests. 16″ overall length.
26 A 1735 X. Wt., 20 lbs. 29.95



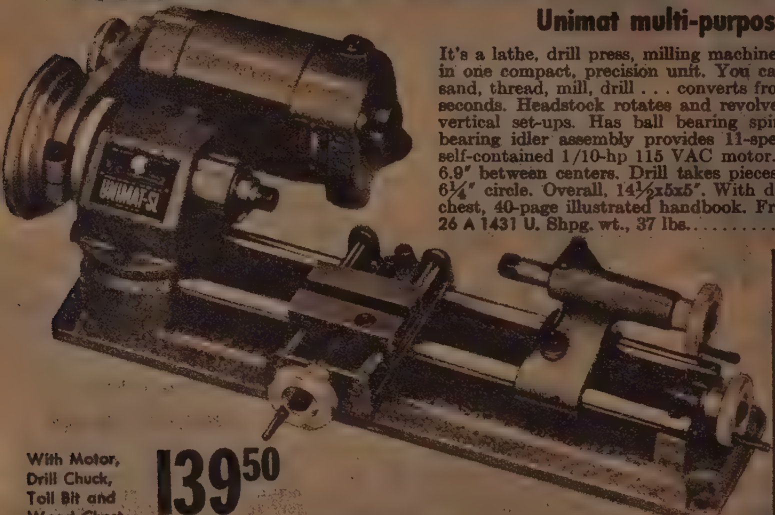
With 3 high-speed knives

29^95 less motor

Precision Power Lathe . . it's 5 tools in one

Unimat multi-purpose 3-inch Lathe

It's a lathe, drill press, milling machine, polisher and grinder . . . a
in one compact, precision unit. You can turn, face, grind, buff, sa
sand, thread, mill, drill . . . converts from one operation to another
seconds. Headstock rotates and revolves 360°, removes from bed f
vertical set-ups. Has ball bearing spindle accurate to .0005". B
bearing idler assembly provides 11-speed drive system, powered b
self-contained 1/10-hp 115 VAC motor. Lathe handles 3"-dia. piece
6.9" between centers. Drill takes pieces 6¼" high, drills to center
6¼" circle. Overall, 14½x5x5". With drill chuck, roughing bit, woo
chest, 40-page illustrated handbook. From Austria.
26 A 1431 U. Shpg. wt., 37 lbs. . . . . 139.



With Motor, Drill Chuck, Toll Bit and Wood Chest

139⁵⁰

Popular Unimat Accessories

A **1290 Power Carriage Feed.** For fine finishing.
26 A 2443. Wt., 6 lbs. 24.95

B **1240 Circular Saw Attachment.** 6x8" table; rip fence; blade guard; arbor. Takes blade to 3½".
26 A 2448. Wt., 4 lbs. 14.95

C **1080 Jig Saw.** 6x8" table; with 12 asstd. blades.
26 A 2445. Wt., 6 lbs. 19.90

D **1100 Six ¼" Lathe Tools.** For turning, facing, bore, cut-off.
26 A 1650. Wt., 8 oz. 10.90

E **1040 Steady Rest.** Supports 1½" bars and tubing for machining, end drilling.
26 A 2444. Shpg. wt., 1 lb. . . 9.95

F **1260 Index Head.** Divides, spaces for making gears, etc.
26 A 2446. Wt., 1 lb. 14.95

G **1002 4-Jaw Independent Lathe Chuck.** For pcs. to 2¼".
26 A 1690. Wt., 1 lb. 23.90

1001 3-Jaw Universal Chuck. 2¼".
26 A 2442. Wt., 1 lb. 24.95

H **1261 Work Plate.** Holds work in lathe. 2¾". With clamps.
26 A 2447. Wt., 1 lb. 6.50

J **1210 Milling Table.** 3x5". Clamps work for milling.
26 A 1689. Wt., 2 lbs. 12.50

K **1010 Machine Vise.** Fits cross slide, mill table. Cap. 1⅛".
26 A 1679. Wt., 13 oz. 9.50

Surface grinder

Milling machine

Universal drill

Vari-Tool Workshop Kit

27⁵⁰ *Includes 16 attachments*

An entire workshop in one unit. Perfect for fine engraving, carving, drilling. Speeds through deburring, model building, grinding and more. Works on wood, steel, glass—all materials. Instant-action chuck changes accessories in seconds. Stay-cool Lexan® housing has large vents. Dynamically balanced armature. Includes: 6 sanding discs, polishing wheel, bristle and wire brushes, 2 grinding wheels, mandrel, rotary file, ⅛" drill, ⅛" collet, collet wrench. U.L. Listed. 117 VAC.
26 A 1802. Wt., 2 lbs. 27.50

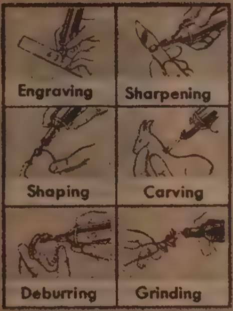
29⁹⁵ less motor

Industrial-quality four-foot Wood Lathe with 12" swing

Full-size lathe for big wood-turning jobs. Excelle
quality at a modest price. Has swing of 12" for piec
to 12" diameter with 36" maximum between cente
Graduated T-rest assembly, screw-action tailsto
ram. Headstock spindle, ¾"; tailstock spindle,
Heavy duty spur center, ball thrust cup center. 49" b
Takes motor below.
26 A 3268 X. Shpg. wt., 29 lbs. . . . . 29.
26 A 3274 X. G.E. Motor. Develops full 1 hp. 1750 rp
For AMT lathe. 115 VAC. Wt., 17 lbs. . . . . 22.

emel super-powered Moto Tools

27.95



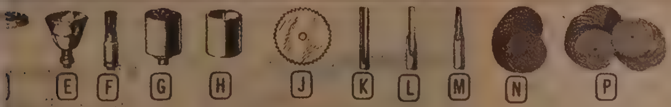
44.95

odel 261 Moto Tool Kit. Super-com-
act Moto Tool fits perfectly in the
of your hand, handles as easily as
ncil. Performs intricate work with
oint accuracy. Has power to spare
lemanding work loads. The 0.5-amp
r delivers 30,000 rpm, with torque
-off so gradual it's almost stall-proof.
amically balanced for vibration-free
ation. Large vents, high velocity fan.
includes 34 accessories, same as
el 271 below. 115 VAC. U.L. Listed.
3195. 3 lbs. 27.95
3249. **260 Tool Alone.** 2 lbs. 21.95

B **Model 281 Heavy duty Moto Tool Kit.** Similar to Model 271 below, but has super-power Moto Tool with extra-rugged ball bearing construction. For its size, this is the fastest, most powerful hand grinder you can buy. Has permanent-magnet 0.9-amp motor with full-wave rectifier—runs at 30,000 rpm, no-load. Weighs only 11 oz. Kit has 34 accessories, same as Model 271 below. U.L. Listed. For 115 VAC. Shpg. wt., 3 lbs.
26 A 3260. 44.95
26 A 3261. **280 Tool Alone.** 2 lbs. . 38.95

odel 271 Moto Tool Kit. Permanent-magnet 0.8-amp motor with full-wave recti-
r (30,000 rpm, no-load). Vibration-free; high velocity cooling fan. Self-lub.
ze bearings, pencil grip extension for detail work. 7¼" long. Only 11 oz. Kit
des 34 accessories: high speed steel cutters, grinding wheels, rubber polishing
rushes, sanding discs, drum sander, mandrels, dressing stone, wrench, 4 collets
3/32", 1/16", 1/32"), case. For 115 VAC. U.L. Listed.
2128. Shpg. wt., 3 lbs. 32.95
2127. **271 Tool Alone.** Shpg. wt., 2 lbs. 26.95

32.95



MOTO-TOOL ACCESSORIES FOR ADDED VERSATILITY

o. 428 Wire Brush. Wt., 1 oz.
6 A 2929. . . . . 50¢
o. 442 Wire Brush. Wt., 1 oz.
6 A 2930. . . . . 50¢
o. 443 Wire Brush. Wt., 1 oz.
6 A 2931. . . . . 50¢
o. 407 Drum Sander. ½" dia.
6 A 2932. Wt., 1 oz. 1.00
2933. No. 430. ⅜" dia. 1.00
rum Sander Bands. Pkg. 12
6 A 2934. 432. ½" fine. 4 oz. . . . . 50¢
2935. 408. ½" coarse. 4 oz. . . . 50¢
2936. 431. ⅜" coarse. 4 oz. . . . 50¢
2938. 433. ⅜" fine. 4 oz. . . . . . 50¢
o. 406 Steel Saw. .005" thick.
6 A 3002. Wt., 1 oz. 1.00
3003. 400. .023" thick 1.00
o. 101 ⅛" Routing Cutter.
6 A 3004. Wt., 1 oz. 1.25
o. 103 1/16" Routing Cutter.
6 A 3005. Wt., 1 oz. 1.25
o 104 1/32" Routing Cutter.
6 A 3010. Wt., 1 oz. 1.25
550 ⅛" Straight Cutter Bit.
1063. Wt., 2 oz. 3.00
652 3/16" Straight Cutter Bit.
1204. Wt., 2 oz. 3.00
654 ¼" Straight Cutter Bit.
1124. Wt., 2 oz. 3.00
10 Convex Edger for Beading.
1291. Wt., 2 oz. 3.00
532 Veining Bit for Line Work.
1135. Wt., 2 oz. 3.00

No. 640 "V" Grooving Bit for Lettering. Chamfer edges.
26 A 1292. Wt., 3 oz. 3.00

N **No. 409 Emery Cutting Wheels.**
26 A 3011. 1 oz. . . . . Pkg. 36/1.50

P **No. 412 Med. Sanding Discs.**, 1 oz.
26 A 2433. . . . . Box of 100/50c

R **No. 223 Universal Stand.** Leaves hands free, can be set at any angle. Cast-iron base will not tip.
26 A 2480. Wt., 2½ lbs. 6.95

S **No. 224 Shaping Table.** Use with 223 Stand for routing, grinding. Raises, lowers to adjust cut depth.
26 A 2485. Wt., 8 oz. 3.95

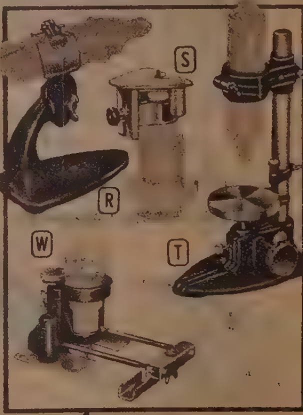
T **No. 225 Drill Press.** Perfect for precision drilling, miniature routing. Table can be raised, lowered; locks in position. Steel. 12" high.
26 A 2491. Wt., 3 lbs. 12.95

W **No. 229 Router Attachment.** Designed to put you closer to the work for greater visability, ease of control. Constructed of steel and Delrin® for long life. Infinite depth adjustment; integral guide bars.
26 A 1025. Wt., 1 lb. 9.95

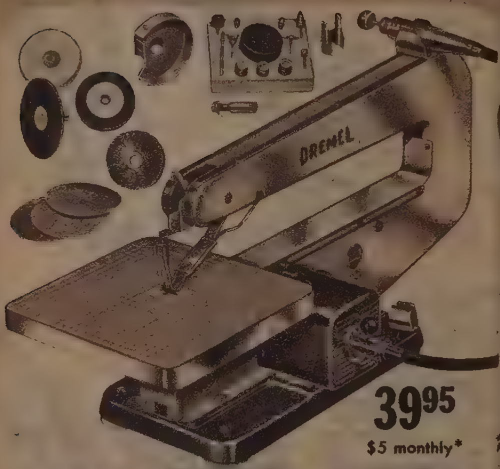
X **No. 220 12-Pc. Cutter Set.**
26 A 3137. Wt., 1 lb. 15.00

Y **No. 240 24-Pc. Cutter Set.**
26 A 3138. Wt., 2 lbs. 30.00

AA **Emery Wheel Grinding Stones.**
26 A 3102. 12 oz. . . . . Pkg. 33/16.50



Power Workshop, Sprayers, Electric Pencil



39^{95}

$5 monthly*

Carving
Routing
Deburring
Sawing
Polishing

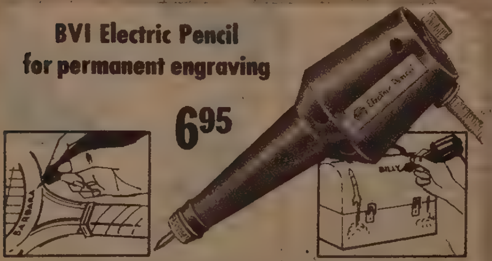
Dremel Moto-Shop Power Workshop

- Five multipurpose power tools in one machine
- Powered by ball-bearing 3450-rpm rotary motor
- Table can be tilted for precision angle cuts

Model 57. Versatile Moto-Shop operates five different tools with unique power takeoff. With attachments connected, 15" jigsaw becomes disc sander, bench grinder, buffing wheel or flexible shaft machine. Jigsaw has four blades, each adapts in three directions. Table tilts for angle cuts. Lightweight flexible-shaft handpiece has $\frac{1}{64}$ to $\frac{1}{8}$" capacity. With finger guard, 12 bits for drilling, grinding, routing, sharpening, deburring, carving. Attachments included: rubber backing pad, 3 sanding discs, grinder, buffer, wire brush, wheel guard, polishing stick. U.L. Listed. 117 VAC.
26 A 1834 X. Shpg. wt., 17 lbs. 39.95

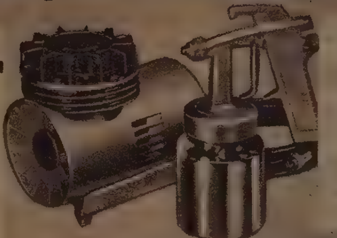
BVI Electric Pencil for permanent engraving

6^{95}



Writes on plastic, metal, wood

Engrave your name on tools, ladders, flashlights, hub caps, anything you want to call your own. Dress up commonplace items with attractive designs or monograms. Marks are clean and permanent. Completely automatic—pick it up, it turns itself on; put it down, it turns itself off. Adjustment knob allows you to vary width of marking. 117 VAC.
26 A 2106. Shpg. wt., 1 lb. 6.95

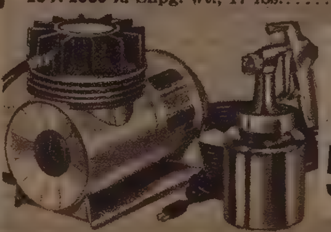


"Compact" fan-nozzled Paint Spray Outfit

34^{95}

$5 monthly*

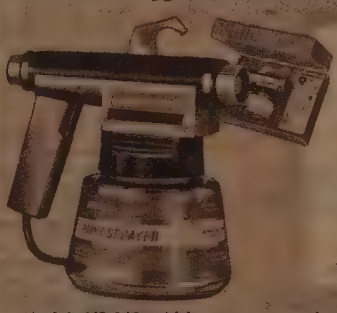
Internal mix gun sprays enamel, flat, oil and wat
base paint, varnish, household liquids. Pint cup, adjustal
trigger, 8-ft. detachable hose. Oil-free compressor has he
resistant diaphragm, replaceable air filter. Quiet, nev
needs oiling. Direct-drive motor. Air delivery 1.1 c
U.L. Listed. For 115 VAC.
26 A 2363 X. Shpg. wt., 17 lbs. . . . . .34.



Deluxe $\frac{1}{3}$-hp all-purpose Spray Outfit

59^{95} $5 monthly

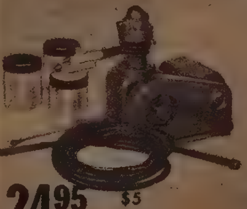
Sprays all paints, lacquers, enamels, household liqui
One-quart cup, internal and external-mix nozzles. C
less compressor has 1000-hour diaphragm, sealed b
bearings, removable air filter, safety valve. Siphon
pressure feed. Air delivery, $2\frac{1}{2}$ cfm. Lifetime-lubricate
15-ft. hose. U.L. Listed. For 115 VAC.
26 A 3100 X. Shpg. wt., 30 lbs. . . . . .59.



BVI complete electric Paint Sprayer Kit

17^{95}

Model VS-868. Airless sprayer gives easy, professio
results. Just plug in to spray paint, enamel, varni
lacquer, insecticides, chemicals. Built-in pump and mot
sapphire nozzle, 24-oz. glass jar. Cleans and lubrica
itself. 6-ft. cord. Kit includes fan-spray nozzle, visco
cup for thinning paint. For 115 VAC.
26 A 1009. Shpg. wt., 6 lbs. . . . . .17.
26 A 1018. Airless Paint Sprayer Alone. $4\frac{1}{2}$ lbs. . . . . .13.



24^{95} $5 monthly*

Hobbyist air brush Paint Sprayer Outfit

Perfect for shading, silho
etting, stencils, and touch-u
Ideal for hobby and model u
ceramics and sign painting. I
cludes compressor with
hose, shading brush with t
nozzles, and paint storage ja
For 110-120 V, 60 Hz AC.
26 A 3639 X. Wt., $8\frac{1}{4}$ lbs. 24.

Dymo Labelmakers and Kits for everyone

88

Low-cost Kit for both ¼" and ⅜" tapes

lel M-6. Makes raised-letter labels that are self-ad-
ve, permanent, waterproof. Just dial each letter,
aber, or symbol and squeeze handle. Squeeze trigger to
off finished label. Kit: plastic embossing tool, 2 wheels
large, small characters, three ⅜" and two ¼" rolls of
e, case. Order extra tapes below.
3183. Shpg. wt., 1½ lbs. 9.88
3184. Tool Alone. Shpg. wt., 10 oz. 6.88

4^{95}

Deluxe Tool prints ⅜", ½", vertical

lel M-20. Versatile kit ideal for office, workshop or
e use. Handles all medium- or large-tape jobs. Pre-
n-made embossing tool, 3 wheels, five ⅜" and five
tapes, case. Wheel for ⅜" tapes embosses basic-size
ers, ½" wheel for giant letters. Third wheel embosses
ers vertically! Order extra tapes below.
3185. Shpg. wt., 4 lbs. 34.95
3186. Tool Alone. Shpg. wt., 2½ lbs. 24.95

" or ⅜"

2^{88}

Budget-Line Labelmakers

fect for light-duty em-
sing work. Tough plas-
6½" body is extremely
stant to breakage and
ping. Embosses 40 dif-
nt characters. Choice of
del with ¼" or ⅜" wheel.
er tape from listing be-
. Wt., 10 oz.
2142. M-4. For use with
tape (below) 2.88
2803. M-38. For use
h ⅜" tape (below) . .2.88

Vertical or Horizontal

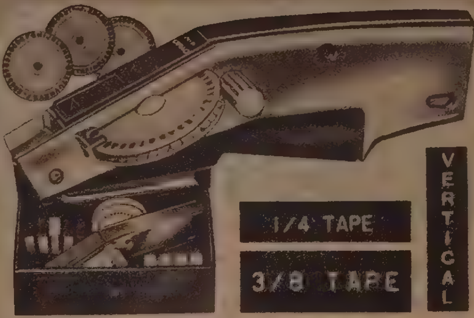
6^{95}

Two-way home Labelmaker Kit

Model 1700. Sturdy high-impact plastic labelmaker takes ⅜" vinyl tape in easy-to-use magazine. Has automatic pull-tab cut-off. Tool, standard embossing wheel, special wheel for vertical letters, 3 tapes, case. Extra tapes below.

26 A 3936. Wt., 1 lb. . . .6.95

26 A 3968. Tool Alone. With 2 embossing wheels, 1 tape. Shpg. wt., 12 oz. 4.95



19^{95}

All-metal Tool embosses ¼", ⅜" and vertically

Model M-10. Our best selling labeling outfit. Labelmaker is polished-chrome-finished for durability and smart appearance. Outfit includes: embossing tool, three wheels, ten rolls of tape, and compact 3x6x9" storage case. One wheel embosses standard-size characters on ¼" tape, one wheel embosses giant-size characters on ⅜" tape, and the third wheel embosses vertically! Five ⅜" and five ¼" rolls of assorted-color tape. See below for extra-color or replacement tapes.

26 A 1355. Shpg. wt., 2 lbs. 19.95

26 A 1353. Tool Alone. With two wheels and 12-ft. roll of tape. Shpg. wt., 13 oz. 14.95

Slimline Tool prints ⅜", ½", vertically

19^{95}

Model 1470. Ideal for studio, classroom, workshop, or office. Slim tapewriter stores flat in drawer or briefcase! With two wheels for ⅜" and ½" tapes; third wheel for vertical characters; two rolls ½" vinyl tape—one black, one red; case.

26 A 1519. Shpg. wt., 1¾ lbs. . . .19.95

26 A 1520. Tool Alone. 1 lb. 16.95

Slimline Tool for ¼" and ⅜" tapes

14^{95}

Model 1450. Easy-to-store tapewriter measures only 8¼x2½x1$\frac{1}{16}$". Brushed aluminum and plastic. Kit includes tool, two wheels for large and small characters, one magazine of ¼" red vinyl tape, one magazine of ⅜" black vinyl tape, carrying case.

26 A 1653. Shpg. wt., 1¾ lbs. . . .14.95

26 A 1654. Tool Alone. 1 lb. 12.95

Genuine Dymo Label-making Tape for all tapewriters on this page

k to almost any clean, smooth surface. Can even be d outside; hold-up well in all weather. In solid and gold-striped colors. Colors (not size) may be assorted for extra savings. Av. shpg. wt., 1 oz.

Stock No.	Tape Size	Use With Labelmaker	Ft.	Type	Colors—Be Sure to Specify Choice	EACH ROLL 1-2	EACH ROLL 3-Up
A 2473 C	¼"	M-4, M-6, M-10, 1450	12	Solid	Clear, Red, Orng., Blue, Grn., Yel., Brn., Blk., Gray, Gold, Walnut	.89	.75
A 1884 C	⅜"	M-38, 1700, M-6, M-10, M-20, 1450, 1470	12	Solid	Red, Orng., Blue, Grn., Yel., Brn., Blk., Gold, Walnut	.99	.89
A 2017 C	⅜"	M-38, 1700, M-6, M-10, M-20, 1450, 1470	10	Stripe	Red, Blue, Grn., Brn., Blk. (gold edges)	1.35	1.19
A 1903 C	½"	M-20, 1470	12	Solid	Clear, Red, Orng., Blue, Grn., Brn., Blk., Walnut, Yel., Gray	1.49	1.25
A 2009 C	½"	M-20, 1470	12	Stripe	Red, Blue, Grn., Brn., Blk. (gold edges)	1.79	1.59

Welding Outfits and Torches for home and shop

139^{95} *60 primary amps welds metal up to 1-inch thick*

180-amp industrial Welder

MODEL 180A-3C7. Our finest heavy-duty industrial arc welding outfit. Welds metal up to 1-inch thick, handles welding rods 5/64" to 3/16". Boasts heavy-duty transformer and extra-stable arc of 25-30 arc volts. Has 16 instant-heat stages to 180 amps. 60 primary amps, 79% power factor.

Continuous operation with 30% duty cycle. Dual-coil design; special insulation. Includes: head shield; electrode holder; electrodes; welding, ground, power cables; ground clamp; instructions. 25¾x16x11½". For 110/220 V; 50-60 Hz AC.
26 A 3635 Z. Shpg. wt., 90 lbs....139.95

119^{95} *35 primary amps welds metal up to ½-inch thick*

Heavy-duty 125-amp Outfit

MODEL 125A-11A5. Heavy-duty arc-welding outfit. Continuous manual duty cycle for fast production and maintenance work. Handles 1/16" to 5/32" rods on metal to ½" thick. 25-30 arc-volts. Offers 16 instant-heat stages from 20 to 125 amps. 35 primary amps. 75% power factor.

Includes: head shield; welding, ground, power cables; ground clamp; 3-prong plug; assorted electrodes; electrode holder; instructions. Dual head construction. Welded metal cabinet in heat-resistant gray enamel. 12¼x16x11½". For 110-220 V, 50-60 Hz AC.
26 A 1115 Z. Shpg. wt., 82 lbs...119.95

79^{95} *29 primary amps welds metal up to ¼-inch thick*

Portable 80-amp Welding Outfi

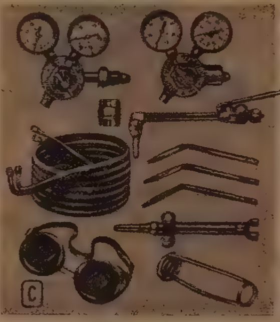
MODEL 80A-11A4. Complete industria type outfit handles 1/16" to 3/32" rods o metal up to ¼" thick. Continuou duty. Provides 9 heat stages from 20 80 amps. 25 arc volts. 29 primar amps with 80% power factor.

Includes: head shield; welding ground, power cables; ground clamp 3-prong plug; electrode holder; as sorted electrodes; instructions. Weld ed gray metal cabinet, 9¼x12½x9¼ For 117 volt, 50-60 Hz AC.
26 A 1116 U. Shpg. wt., 39 lbs...79.9
MODEL D-17 Carbon Arc Torch. Give constant 9000°F arc. For all models.
26 A 1576 X. Shpg. wt., 4 lbs....24.9

Microflame Welds, brazes, cuts most metals

Low as 15^{96}

TURNER 6^{88}



A Versatile Microflame miniature Torch

Self-contained torch uses miniature oxygen and LP cylinders. Develops over 5000°F. Only 5¼x2x1¼". 3 tips, torch tube, gaskets, 2 oxygen and 1 butane cylinders, instructions. In plastic box. Shpg. wt., 1 lb.

26 A 3275. 1-5	Each 17.95	6-Up	Each 15.96
26 A 3276. Oxygen Cylinder			Each .75
2-5	Each .70	6-Up	Each .60
26 A 3277. Butane Cylinder			Each .50
2-5	Each .45	6-Up	Each .40

B All-purpose propane-gas Torch Outfit

LP-99. For a wide variety of uses. Brass torch has heavy-duty valve with drag spring on knob. Includes: pencil-point burner; heavy-duty burner; brass flame spreader; copper chisel-point solder tip; tank of fuel; spark lighter; steel case. 3x10¼x6". U.L. Listed.
26 A 1081 X. Shpg. wt., 4½ lbs....................7.88

C Turner oxyacetylene/propane Welding Outfit

Designed for expert welding, cutting, brazing, soldering o heating. Welds metal up to ¼" thick; cuts metal up to 1½ thick. Professionally-rated, single-stage outfit includes: torc handle and mixer assembly; oxygen regulator; actylene o propane regulator; three welding tips—numbers 1, 5 and 8 Also cutting attachment, tip; goggles; spark lighter; 12½-ft hose; fittings and adapters. Needs only oxygen and acetylen or propane cylinders. Shpg. wt., 17 lbs.
26 A 1522 X....................89.5

D Turner heavy-duty welding/cutting Outfit

Welds metal to 1", cuts to 2". Includes: torch handle and mixe assembly; oxygen regulator; regulator for acetylene or propane 3 welding tips; cutting attachment and tip; goggles; spark lighter; 20-ft. of hose; fittings and adapters. Needs only oxyge and acetylene or propane cylinders.
26 A 1454 X. Shpg. wt., 22 lbs....................109.9

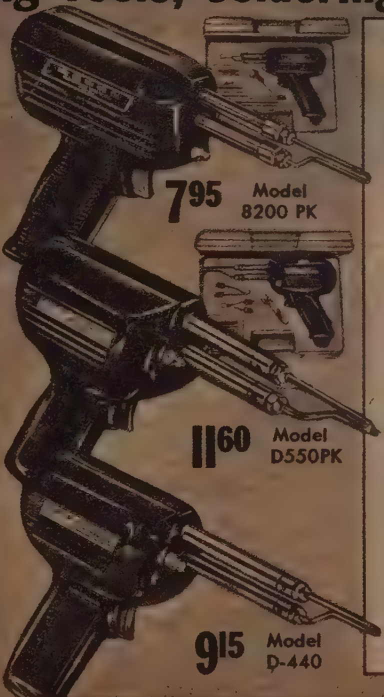
SHIPPING NOTE: Items with suffix U, W or Z in stock no. sent truc or express. See Ordering Information page

ler Soldering Tools, Soldering Gun Outfits

:00 PK Soldering Outfit. :al soldering kit has g you need for fast, easy Includes: 100/140-watt "Expert" soldering gun; spare) copper soldering ench; brush; solder-aid der; instructions. Bal- a has spotlight to illumi- k. In hi-impact plastic . Listed. For 117 VAC. . Shpg. wt., 2½ lbs. . 7.95
. **Gun Alone.** 2 lbs. . . . 6.60

550PK Soldering Outfit. ty outfit includes: 240/ dual-heat soldering gun; ldering, cutting, smooth- wrench; solder; instruc- trigger positions select 2 ures—instantly provides ed for job. Copper tips, s. U.L. Listed. 117 VAC. . Shpg. wt., 5½ lbs. 11.60
. **Model D550 Soldering** . Shpg. wt., 4 lbs. . . . 9.95

40 Medium-Duty Soldering venient trigger selection 145 or 210 watts lets you ne proper heat required b. Almost instant warm- tip makes it perfect for a ety of uses—no waiting heat. Dual pre-focused illuminate work. In- ficient, long-life copper Listed. 117 VAC.
. Shpg. wt., 3 lbs. . . . 9.15



7^{95} **Model 8200 PK**

11^{60} **Model D550PK**

9^{15} **Model D-440**

"Tempmatic" temperature controlled Soldering Tool

Low as 7^{95}

Powerheads can be switched quickly and easily for top versatility and convenience

Model GT-7A. Fast-heating trigger action gun. Changeable temperature controlled powerheads . . eject one, push in another. Premium plated 700°F 3/16" chisel point powerhead. 117 VAC. Shpg. wt., 3 lbs.
26 A 1694. 1-2. . . . . Each 9.95
3-11 . . Each 8.95 12-Up . . Each 7.95
Model GT-6B. Above, but 600°F ⅛" conical point powerhead. 3 lbs.
26 A 1695. 1-2. . . . . Each 9.95
3-11 . . Each 8.95 12-Up . . Each 7.95
26 A 1696. GT Gun. 1 lb. 3.00
26 A 1697. 7A Pwrhd. ½ lb. . . . 6.95
26 A 1698. 6B Pwrhd. ½ lb. 6.95

er Tips and Accessories

Accessory Tips. 3 oz.

Type	Descrip.	For Models	EA.
6110	Cutting	WS-100, WD-135, S-400, D-440	.50
6120	Smoothing	8100 (B), 8200	.50
6130	Cutting	WS-200, S-500	.50
6140	Smoothing	D-550, 8250A	.50

ent Tips. 2 per pkg. 3 oz.

Type	Use With Models	EA.
7135	WS-100, WD-135, S-400, D-440, 8200	.50
7250	WS-200, WD-250, S-500, D-550, 8250A	.50
7300	S-107, D-207. Not interchangeable with above.	.50
8125	8100B, 8200	.50

ent Parts. Type 7325 and nuts for connecting tips to 4 is trigger switch. 3 oz.

7325	D-440, S-440, 8100 8100B, 8200	.20
7417	D-550, S-500, 8250A	.20
7324	All Dual-heat types	1.20

en Replacement Tips

els 450 and 222. Light duty, ; medium 100-200W; heavy, W. *For Model 450 only. 2 oz.

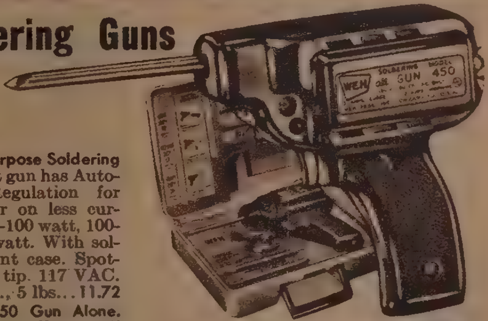
	Type	Tip	EA.
5	45F7	Light-duty	.98
6	45M7	Medium-duty	.98
7	45A7	Heavy-duty*	.98
8	45P57	Smoothing	.45
9	45S7	Cutting	.45

l 75. Av. shpg. wt., 4 oz.

9	75A7	Standard solder	.70
1	75B7	Fine point	.70

Wen Soldering Guns

11^{72}



Model 450K4 Multipurpose Soldering Outfit. 25 to 450 watt gun has Automatic Thermal Regulation for more heating power on less current. Three tips—25-100 watt, 100-200 watt, 200-450 watt. With solder in shock-resistant case. Spotlight. 11" long with tip. 117 VAC.
26 A 3267. Shpg. wt., 5 lbs. . . 11.72
26 A 2674. Model 450 Gun Alone. With 45 A 7 tip. Wt., 3 lbs. . . 9.97

4^{17}

With Automatic Thermal Regulation

Model 75 Soldering Pistol. Gives heat of 100-watt device from peak surge of only 50 watts and normal draw of 30 watts—automatically. Instant heat. Heavy copper tip for repeated dressing down; single set-screw. U.L., C.S.A. Listed. 117 VAC.
26 A 2479. Shpg. wt., 1¼ lbs. 4.17

8^{79}

Model 222K5 Dual-Heat Soldering Outfit. Two heat ranges depending on tip: 25-100 or 100-200 watts. Automatic Thermal Regulation. Smoothing and cutting tips. Spotlight. 9¼" long. U.L. and C.S.A. Listed. 117 VAC.
26 A 1023. Shpg. wt., 4 lbs. 8.79
26 A 1022. Gun Alone. 2¼ lbs. . . . 5.83

Ungar Soldering Tools

Lightweight, less than 5 oz.
Model 6760
9.95
Air-flow handle for cooler grip
Model 7070
Low as
4.48
Low as
1.36

Professional Soldering Gun for ICs and F

Model 6760. Designed for service technicians and s electronics hobbyists. Features soldering tip electr isolated from heating element to assure *safe, damag* soldering of integrated circuits and field effect transi Solid-state design permits dramatic weight reduction replaceable tips. Dual "hi-lo" heat control allows in selection of temperature of approximately 500° F. or 9 With 3 interchangeable tips to handle almost any density circuitry soldering.
26 A 1734. Shpg. wt., ½ lb. . . . .

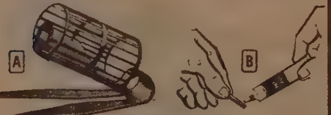
High-heating pencil-type Soldering Kit

Model 7070 Outfit. Ideal for kit construction and g solid-state electronics work. Air-flow design provides grip. Outfit contains: Type 1237 heating unit (37½ temperature 750° F. to 800° F.); Type 777 lightw pastel-colored polypropylene handle (will not crum dust); three interchangeable thread-on copper tips (p chisel and pyramid) to handle virtually every sol job; spool of 60/40 resin core solder. For 117 VAC. Listed. Shpg. wt., 1 lb.
26 A 1036. 1-5. . . . . . . .Each 4.88 6-Up. . . . . .Eac

776 and 777 fatigue-free Handles with Cord

Type 776 Handle. Accepts variety of thread-in elements and tips. Spring socket holds tip firmly—can't wobble or give. Non-conductive ceramic and glass internal insulation. Stainless steel deflector. Cork grip and thermo-stabilized 5" phenolic body; vinyl-covered cord. U.L. Listed. Order appropriate elements and soldering tips at right. Shpg. wt., 4 oz.
26 A 1304. 1-9. . . . . .Each 1.65
10-Up. . . . . .Each 1.36

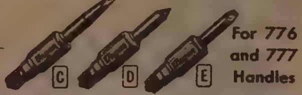
Type 777 Handle. Same as 776 above, but made of pastel-colored phenolic. Heat stabilized octagon-shaped grip is convection cooled. U.L. Listed. Shpg. wt., 4 oz.
26 A 1029. 1-9. . . . . .Each 1.87
10-Up. . . . . .Each 1.53



A **Soldering Iron Holder.** Wire guard protects user from burns, also protects iron. Mounts on any bench or wall. Adjust angle. 8 oz.
26 A 1606. For Standard Line. . . 1.95
26 A 1702. For Imperial Irons. . . 1.95

B **Type 8001 Anti-Seize Compound.** Prevents tip from "freezing" to element, lubricates threads. Reduces seizure and corrosion. ½-oz. tube. Shpg. wt., 3 oz.
26 A 1356 65

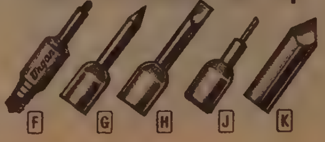
Elements with Tips



Fit 776 and 777 handles. 533, 536, 539, 1233, copper alloy tip; 1236 and 1239, silver-plated iron; 4033, 4036, 4039, silver-plated iron-clad copper alloy. U.L. Listed. 115 V, AC-DC. 2 oz.

Stock No.	Type	Fig.	Tip	EA.
23½ WATTS—660-700° F.				
26 A 1400	533	C	Chisel, 1⅝x3/16"	1.52
26 A 1478	536	D	Pyramid, 1⅛x5/16"	1.52
26 A 1479	539	E	Chisel, 1⅛x5/16"	1.52
37½ WATTS—750-800° F.				
26 A 1401	1233	C	Chisel, 1⅝x¼"	1.92
26 A 1480	1236	D	Pyramid, 1⅛x5/16"	1.92
26 A 1481	1239	E	Chisel, 1⅛x⅜"	1.92
47½ WATTS—850-1000° F.				
26 A 1498	4033	C	Chisel, 1⅝x¼"	3.17
26 A 1499	4036	D	Pyramid, 1⅛x⅜"	3.17
26 A 1500	4039	E	Chisel, 1⅛x⅜"	3.17

Thread-on Elements and Tips



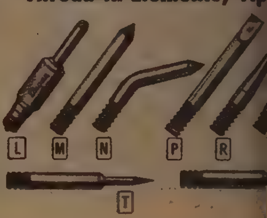
F **Thread-on Elements.** Use with 100 series thread-on tips. Nickel-plated copper alloy. For 110-120 V, AC-DC. Shpg. wt., 2 oz.

Stock No.	Type	Temp.	Watts	EA.
26 A 1403	4037	850-900°F	47½	3.17
26 A 1402	1237	750-800°F	37½	2.13
26 A 1593	537	600-650°F	23½	1.77

Series 100 Thread-on Tips. For 537, 4037 or 1237 elements. ¾" long. Silver-clad copper alloy tips, except *unplated. Shpg. wt., 2 oz.

Stock No.	Type	Fig.	Description	EA.
26 A 1404	PL-111	G	pencil	.80
26 A 1406	111*	G	pencil	.40
26 A 1405	PL-113	H	chisel	.80
26 A 1407	113*	H	chisel	.40
26 A 1040	PL-114	J	micro-spade	.80
26 A 1041	PL-116	K	pyramid	.80
26 A 1048	116*	K	pyramid	.40

Thread-In Elements, Tip



L **Thread-in Elements.** For Tiple 776 and 777 handles. 535, 4035 fit ⅛" Tiplets; 4045 fits lets and tips. Shpg. wt., 4 oz.

Stock No.	Type	Tip Temp.	Watt
26 A 1482	535	600-650°F	23½
26 A 1488	1235	700-750°F	37½
26 A 1490	4035	800-850°F	47½
26 A 1105	4045	800-850°F	47½

Series 300 ⅛" O.D. Tip

For subminiature work. Threa 535, 1235, 4035 elements (abov ver-plated, iron-clad copper allo except *unplated copper. 1" lo cept PL-332 and 332, 1¼"; ⅝". PL-338, 7154, 7155 hav point; PL-340, 3/64" point. 715 are Stepped Tiplets. 2 oz.

Stock No.	Type	Fig.	Descriptio
26 A 1469	PL-331	M	Pencil
26 A 1483	331*	M	Pencil
26 A 1470	PL-332	N	Offset pencil
26 A 1484	332*	N	Offset pencil
26 A 1471	PL-333	P	Chisel
26 A 1485	333*	P	Chisel
26 A 1101	PL-338	R	Tapered need
26 A 1409	PL-340	S	Micro-spade
26 A 1755	7154	T	Stepped penc
26 A 2068	7155	U	Stepped chis

Series 800 3/16" O.D. Tip

As above, but with 3/16" shank with 4045 element, above. Iron- except *unplated. 1" long excep 833 and 834. 1¾" long taper.

26 A 1410	PL-823	. . . .	Pyramid
26 A 2023	823*	. . . .	Pyramid
26 A 1411	PL-824	[illegible]	Chisel
26 A 2024	824*	P	Chisel
26 A 1412	PL-833	[illegible]	Chisel
26 A 1413	PL-834	N	Offset chisel

ingar Soldering Outfits and Accessories

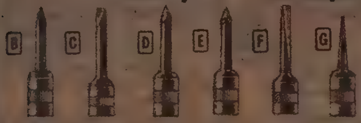
niniature component Soldering Outfit

00. A perfect workbench combination for sol-
icro-electronic circuitry. It's like working
ine ball-point pen. Ideally suited for hair-
e, micro-resistors, capacitors and diodes.
quoise handle, two-wire cord, 10-watt heat
three soldering tips, iron holder, and cleaning
or 110-120 V, 60 Hz AC.
. Shpg. wt., 10 oz. 10.66

Imperial 6-piece 40-watt Soldering Outfit

Model 6010. Meets the increasing need for efficiency in the modern electronics industry. Combines ease of operation and dependability in attractive, lightweight package. Handles like a pencil. Kit contains: 40-watt cartridge; 3 Mini-tips (long taper chisel, pyramid, micro-chisel); Imperial Handle; 2-wire cord. U.L. Listed. For 110-120 V, AC-DC. Shpg. wt., 8 oz.
26 A 1053. 1-5. . . . . .Each 7.55   6-Up. . . . . .Each 7.20

Select your own Imperial Handles, Cords, Elements, Tips



Interchangeable Thread-On Mini-Tips®

w. *24-kt. gold plated, iron-clad; †copper. 2 oz.

Mfr's. Type	Fig.	Description	Size	EACH 1-9	EACH 10-Up
6304	A	*Micro-chisel	3/64x1/2"	1.06	.89
6312	B	†Pencil	1/8x3/4"	.48	.40
6318	C	†Long taper chisel	1/8x3/4"	.48	.40
6319	C	*Long taper chisel	1/8x3/4"	1.06	.87
6324	D	†Long taper pyramid	1/8x3/4"	.48	.40
6325	E	*Long taper pyramid	1/8x3/4"	1.06	.89
6331	F	*Screwdriver	1/8x3/4"	1.06	.89
6333	G	*Needle	1/8x3/4"	1.06	.89
6520	. . . .	†100-w. cart. chisel	1½x1½"	1.29	1.08

"Long-Life" Heat Cartridges

Steel. U.L. Listed. For 115 V, AC-DC. 1 oz.

o.	Type	Watts	1-9, EACH	10-Up, EACH
49	6207	100	6.31	5.30
25	6203	60	4.73	3.97
22	6200	40	4.12	3.46
23	6201	30	4.12	3.46
24	6202	25	4.12	3.46

"Perma-Cool" Handles

Type 6100. Functional handles weigh only 1 oz. Fit heat cartridges, below at left. Double cushion of air and five heat-transition surfaces for cool operation. Made of polycarbonate resin, have die-cast aluminum heat sink. 4.7" long; 0.8" diameter at grip. Shpg. wt., 2 oz.

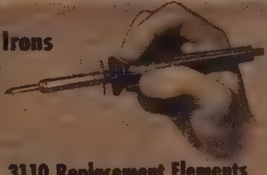
Stock No.	Color	EACH 1-9	EACH 10-Up
26 A 1616	Beige	1.52	1.28
26 A 1617	Ivory	1.52	1.28
26 A 1618	Turquoise	1.52	1.28
26 A 1579	Black	1.52	1.28

Plug-in Power Cords

Type 6102. Vinyl-covered 2 or 3-wire power cords for Imperial handles. Choice of 4 colors to match handles above. Molded-on female connector, positive slip-on action, and snap-lock. Polyvinylchloride installation on both wire and plug. 18-gauge wire; each conductor 65 strands .005 wire. U.L. Listed. For 115 V, AC-DC. Wt., 3 oz.

Color	Stock No.	2-Wire, EACH 1-9	2-Wire, EACH 10-Up	Stock No.	3-Wire, EACH 1-9	3-Wire, EACH 10-Up
Beige	26 A 1683	2.22	1.86	26 A 1685	3.88	2.74
Ivory	26 A 1684	2.22	1.86	26 A 1686	3.88	2.74
Turquoise	26 A 1619	2.22	1.86	26 A 1620	3.88	2.74
Black	26 A 1663	2.22	1.86	26 A 1661	3.88	2.74

ttle Dandy" Soldering Irons
by American Beauty



tweight • Plug-in tips
ated grip • Can't roll

lel 3110—25 watts

ighly efficient, precise
ng performance for
luty production-line
leats to operating tem-
e quickly. Handle re-
ool, won't char. Tips
hanged in seconds even
on is hot. "Lexan" per-
ance handle, anti-roll
stainless steel element
Vith 274 nickel-plated
ewdriver tip. 6½" long.
t., 5 oz. For 110-120 V,
AC.
72. 3110 2-wire type.
ch 4.70   6-Up. .Each 4.46
34. 3110-53 3-wire type.
ch 5.40   6-Up. .Each 5.13

3110 Replacement Elements

Stock No.	Type	Watts	EA.
26 A 1095	9010	25	3.10
26 A 1097	9010	30	3.10
26 A 1098	9010	35	3.10

3110 Nickel-Plated Tips

Stock No.	Type	Description	EA.
26 A 1068	274	3/16" Screwdriver	.26
26 A 1069	275	1/8" Screwdriver	.26
26 A 1070	277	3/32" Diamond	.26
26 A 1071	278	1/8" Diamond	.26

3110 "Paragon" Iron-Clad Tips

26 A 1054	602	3/16" Chisel	1.40
26 A 1055	604	3/32" Chisel	1.40
26 A 1064	605	1/8" Chisel	1.40
26 A 1065	610	3/16" Diamond	1.40
26 A 1066	613	3/16" Screwdriver	1.40
26 A 1067	618	1/8" Screwdriver	1.40

"Marksman" Soldering Irons by Weller

H **Featherweight SP-23 25-watt Pencil Iron.** Features long-reach stainless steel barrel. Thin, nickel-plated removable tip. Develops 750° F. 115 VAC.
26 A 2391. Shpg. wt., 8 oz. 2.50

J **Lightweight SP-40 40-watt Pencil Iron.** Compact iron weighs only 2 oz. Excellent for detailed work. Has ¼" diameter plated-copper tip. 115 VAC.
26 A 3121. Shpg. wt., 8 oz. 3.35

"Marksman" 25-watt Soldering Outfit

Model SP-23-K. Complete soldering outfit features the "Marksman" 25-watt pencil iron above. Kit also includes three different pre-tinned nickel-plated copper tips, soldering aid tool, 5-ft. 60/40 resin core solder, instructions. 115 VAC.
26 A 2392. Shpg. wt., 8 oz. .3.70

Soldering Tools and Accessori

17 75

Easy soldering or desoldering with full 360° "wrap-around" contact

Endeco 9-piece Desoldering Kit

Model 300-K. For almost any desoldering or soldering job. Only 8″ long, it weighs just 3½ oz. Removes miniature soldered components in seconds without damage. Solders new connections even faster with 360° "wrap-around" contacts. Simple one-hand operation. 40 watts. With 6 tips from 0.38 to .090, tip cleaning tool, steel box. 117 VAC. 26 A 1195. Shpg. wt., 3 lbs. 17.75

X-Acto 348 Solder aid Kit

Now you can do professional-quality soldering every time. Manufactured from hard chrome-plated steel, to which solder will not adhere. Tools include fork, knife and scraper, tracer, reamer, brush, double-chuck handle and see-thru carrying case.
26 A 1229. Shpg. wt., 1½ oz. 2.98

UNGAR

Ungar
Low as 9

Hot-Vac Desolderer and Solderer

Also for heat-shrinkable tubing

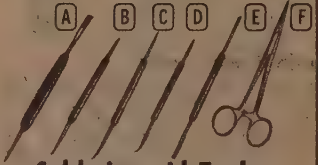
Type 7800. Desolders and cleans printed circuit boa
Hot-Vac melts solder, which is sucked up into colle
by bulb. Special coating makes tip-tinning unnecess
Also for heat-shrinkable tubing. With 37½-watt elem
For 115 volts AC. Shpg. wt., 12 oz.
26 A 1028. 1-5 . . . . Each 1
6-Up . . . . Each

Better connections, longer tip life

13

Ungar "Kleen-Tip" K

Type 400. Removes oxida
and excess solder from sol
ing tips. Consists of speci
processed sponge and phen
tray. Shpg. wt., 2 oz.
26 A 1421 . . . .
26 A 1422. Type 455 Refill Spo
Shpg. wt., 2 oz. . . . .



Soldering-aid Tools

A G-C 9088. One end has stiff wire brush for cleaning wire and terminals before soldering; other end shaped to hold wires during soldering. Solder does not stick to chrome-tipped probe. 8″. 4 oz.
26 A 1000 . . . . 98¢

B C G-C 9075 and 9076. Double ends ream, hold, or pry. Heat-treated tool steel. Chrome plated to prevent solder from sticking. 4 oz.
26 A 1728. (B) Straight Probe . . . 78¢
26 A 1729. (C) Angled Probe . . . 78¢

D G-C 9093. For printed circuits. Offset and slotted probes of hardened stainless steel—solder does not stick to tool. 8″ long. 4 oz.
26 A 1586. 98¢

E G-C 9094. Stainless steel brush, hardened steel scraper. For printed circuit boards. Solder does not stick to tool. 8″ long. 3 oz.
26 A 1587. 96¢

F Xcelite 42H Seizer. Versatile, 6″ straight-nose tool clamps tightly. Holds wires for soldering, acts as a heat sink, retrieves small parts from hard-to-reach places. Precision made of stainless steel. 3 oz.
26 A 1255 . . . . 3.93
26 A 1256. Type 43H. As above, but has curved nose 4.07

Ersin and Kester non-corrosive Sol

A Solder for every purpose . . types for hobbyist, radio and TV serviceman

Kester Solders

Kester "44". Fast-melting for high-speed soldering. Resin flux core. Non-corrosive, non-conductive. 60/40 alloy.

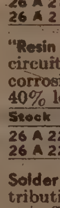
Stock No.	Dia.	Net	Shpg.	EACH
26 A 2112	.062″	1 lb.	1¼ lb.	2.14
26 A 2164	.031″	1 lb.	1¼ lb.	2.82

"Resin Five" Core Solder. For printed circuits. Has active Resin flux. Non-corrosive, non-conductive. 60% tin, 40% lead.

Stock No.	Dia.	Net	Shpg.	EACH
26 A 2234	.062″	1 lb.	1¼ lb.	2.14
26 A 2285	.031″	1 lb.	1¼ lb.	2.82

Solder Paste. Provides an even distribution of active ingredients. 2-oz. can. Shpg. wt., 5 oz.
26 A 1578 . . . . 15¢

Tinning Block. Shpg. wt., 1¼ lbs.
26 A 1582 . . . . 65¢



Printed-Circuit Pak. 40% lead, 60% tin alloy resin-core solder for printed circuit boards. 18-ga., 5 cores. In flameproof aluminum dispenser. 5 oz.
26 A 1599 . . . . 69¢

Ersin extra-fine-gauge Sol

Five-core solder, 60% tin, 40%
*Eutectic—37% lead, 63% tin,
Federal spec. QQ-S-571. Each
age contains four ½-lb. spools.
wt. per package, 3 lbs.

Stock No.	Gauge	E
26 A 3015	24 (.022″)	1
26 A 3016	28 (.014″)	1
26 A 3017	32 (.0108″)	1
26 A 3018	34 (.009″)	2
26 A 3056	*20 (.036″)	7
26 A 3057	*24 (.022″)	1
26 A 3058	*28 (.014″)	1
26 A 3059	*32 (.0108″)	2

Ersin multicore Solders

Tin/Lead Solder. Non-corrosive
flux. 60% tin, 40% lead; 1-lb. s
Shpg. wt. per spool, 1¾ lbs.

Stock No.	Gauge	E
26 A 1730	16 (.064″)	3.
26 A 1733	18 (.048″)	3.
26 A 1736	20 (.036″)	3.

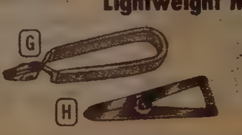
Resin multicore Solder. 5 cores o
40% tin, 60% lead. 1-lb. spools.
wt. per spool, 1½ lbs.

26 A 1594	16 (.064″)	2
26 A 1313	18 (.048″)	2

"Savbit" Solder. 5 cores of flux. Co
tin-lead alloy reduces tip wear,
greater strength. 1-lb. spools.
wt. per spool, 1¾ lbs.

26 A 1123	16 (.064″)	3.
26 A 1629	18 (.048″)	3.
26 A 1635	20 (.036″)	3.

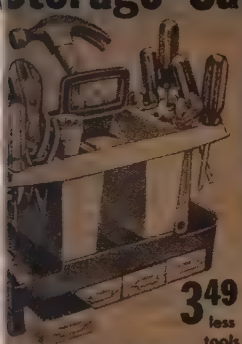
Lightweight Miller and G-C Soldering Heat Sinks



G Miller 80. Spring-type sink. Copper jaws, p
covered handles. Shpg. wt., 6 oz.
26 A 1743 . . . .

H G-A 9077. Aluminum sink gives firm grip.
26 A 1742 . . . .

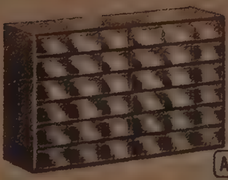
Storage Cabinets and Hardware

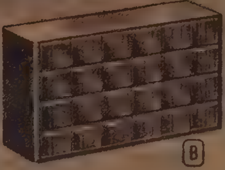


3⁴⁹ less tools

ro-Mils Tool Caddy

total of 39 different tool- slots. Two large storage or other items. Four dust- wers for small parts. Large ip handle. High-impact luty styrene. Easy-to-as- 11½x14x7". Tools not in- Shpg. wt., 3½ lbs.
89 X.......................3.49





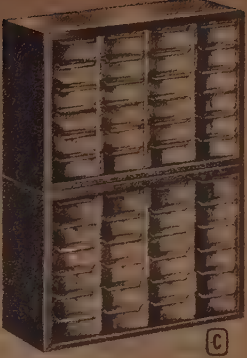
Akro-Mils Storage Cabinets

Convenient cabinets for home or shop. Available in your choice of molded clear styrene "See-Thru" or opaque extra-heavy-duty polystyrene drawers. Can be used individually on flat surfaces, in rows, stacked vertically or mounted on wall. Welded steel frames for added durability. Gray finish. Cabinets, 17⅞" wide*. Type 17 has "See-Thru" drawers; Type 18 has opaque extra-heavy-duty drawers. Av. shpg. wt., 15 lbs.

Stock No.	Mfr's Type	Fig.	Cabinet HxD*	Drawers No.	Drawers HxWxD In.	EACH
26 A 2501 X	17-136	A	11x6"	36	1¹⁄₁₆x2¼x5⅜	13.49
26 A 1700 X	17-024	B	10x6"	24	2x2¼x5⅜	13.49
26 A 1722 X	18-136	A	11x6"	36	1¹⁄₁₆x2¼x5⅜	13.49
26 A 1723 X	18-024	B	10x6"	24	2x2¼x5⅜	13.49

18 drawer Cabinet

4³¹



C Steel-frame Cabinets

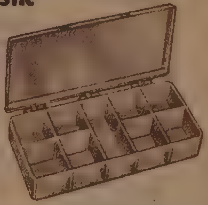
Extra low prices on tool cabinets with husky all-steel welded frames. Feature clear-plastic "See-Thru" drawers, 2¾ 1¼x5¾". Adjustable dividers. Baked-on enamel finish. Labels and one divider per drawer included. Depth, 6".

Stock No.	No. of Drawers	Size H & W	Wt., Lbs.	EACH
26 A 1739 X	18	9x10"	5½	4.31
26 A 1780 X	24	9x13"	7	5.63
26 A 1975 X	48	18x13"	13	8.95

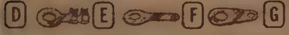
lchek polystyrene Storage Boxes . . strong, lightweight clear plastic

o.	Type	*	Compartments Size	Overall Size	Lbs.	EA.
75	P250	1	5⅞x3⅝"	6¼x4x1¹⁄₁₆"	1	.42
78	P203	6	1¼x3 ⁵⁄₁₆"	8¼x4½x1⅜"	1½	.54
79	P210	9	8—1⅜x1⅝"; 1—1⅛x3¼"	7x3¾x1¼"	1	.41
80	P201	12	6—1¼x1¼"; 4—1¼x2"; 2—1¼x3 ⁵⁄₁₆"	8¼x4½x1⅜"	1½	.54
81	P612	12	6—1⅝x1¹⁵⁄₁₆"; 6—1⅝x4"	11x6¾x1¾"	2	1.26
94	P812	12	2x4³⁄₁₆x2¹⁄₁₆"	13⅛x9x2⅝"	1	2.04
82	P200	18	1¼x1¼"	8¼x4½x1⅜"	¾	.54
83	P618	18	1⅝x1¹⁵⁄₁₆"	11x6¾x1¾"	2½	1.28
84	P818	18	12—2x2"; 6—2x4³⁄₁₆"	13⅛x9x2⁵⁄₁₆"	3	2.07
85	P824	24	2x2"	13⅛x9x2⁵⁄₁₆"	3½	2.13
95	P166	36	1½x1¹⁄₁₆x1⁹⁄₁₆"	10x7x1¹³⁄₁₆"	3½	1.41

All-plastic hinged-top with 1 to 36 compartments for storing small parts or hardware. Rigid, lightweight, scratch-resistant, easy to clean. Strong hinge design. P250 has removable cover. *No. of compartments per box.



G-C Hardware Assortment for everyone—technician, homeowner, hobbyist



Soldering (and Solderless) Lugs. or E are solderless lugs. No. 8 ake no. 6 screws. Wt., 3 oz.

	Hole Size	Lgth.	Fig.	Quantity	PER PKG.
91	No. 6	²¹⁄₃₂"	D	25	.39
92	No. 8	⅝"	D	25	.39
93	No. 6	¹¹⁄₁₆"	F	30	.39
94	No. 6	⁵⁄₁₆"	G	30	.39
95	No. 8	⁵⁄₁₆"	G	30	.39
96	No. 6	¹¹⁄₁₆"	E	25	.39
97	No. 8	¹¹⁄₁₆"	E	25	.39

Internal Lock Washers. Star-type. Hold screws tight under vibration. Cadmium plated. Av. shpg. wt. per pkg., 2 oz.

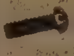
k	Screw Size	O. D.	Quantity	PER PKG.
163	No. 4	......	50	.39
196	No. 6	⁹⁄₃₂"	50	.39
197	No. 8	²¹⁄₆₄"	50	.39
198	No. 10	⅜"	45	.39

Metal Washers. Nickel plated. ¹⁄₃₂" thick. For screw sizes indicated. Av. wt., 3 oz.

t	Screw Size	Hole Size	O. D.	Quantity	PER PKG.
05	No. 4	⅛"	⁹⁄₃₂"	80	.39
06	No. 6	⁵⁄₃₂"	⅜"	80	.39
07	No. 8	³⁄₁₆"	⁷⁄₁₆"	80	.39

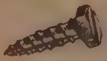
Binding-Head Machine Screws. Nickel plated steel. Extra-wide shoulder. Av. wt., 3 oz.

Stock No.	Size	Quantity	PER PKG.
26 A 2718	2-56x¼"	40	.39
26 A 2719	2-56x½"	40	.39
26 A 2720	4-36x¼"	40	.39
26 A 2721	4-36x½"	35	.39
26 A 2722	4-36x¾"	35	.39
26 A 2723	4-40x¼"	40	.39
26 A 2724	4-40x½"	35	.39
26 A 2726	6-32x¼"	35	.39
26 A 2727	6-32x¾"	30	.39
26 A 2728	8-32x¾"	25	.39



Round-Head Machine Screws. Nickel-plated steel with slotted round heads. Av. shpg. wt. per package, 3 oz.

Stock No.	Size	Quantity	PER PKG.
26 A 2709	2-56x¼"	40	.39
26 A 2710	2-56x½"	40	.39
26 A 1166	4-36x¼"	40	.39
26 A 1167	4-36x½"	35	.39
26 A 2711	4-40x¼"	40	.39
26 A 1170	6-32x¼"	40	.39
26 A 1172	6-32x½"	30	.39
26 A 1173	6-32x1"	30	.39
26 A 2715	8-32x½"	25	.39
26 A 2717	8-32x1"	20	.39
26 A 1175	10-32x½"	20	.39



Hex-Head Sheet Metal Screws. Nickel-plated, slotted, self-tapping screws. Pointed type "A." Av. shpg. wt., 2 oz.

Stock No.	Size	Quantity	PER PKG.
26 A 1176	4x½"	35	.39
26 A 2737	6x¼"	30	.39
26 A 2738	6x⅜"	25	.39
26 A 2739	6x½"	25	.39
26 A 2741	8x½"	20	.39

Hexagon Nuts. Nickel plated steel resists oxidation. *Indicates thickness. Av. shpg. wt., 3 oz.

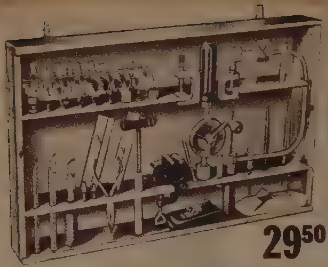
Stock No.	Thr'd	Width	*	Quan.	PKG.
26 A 2742	2-56	³⁄₁₆"	¹⁄₁₆"	30	.39
26 A 1186	4-36	¼"	³⁄₃₂"	30	.39
26 A 2744	4-40	¼"	³⁄₃₂"	30	.39
26 A 1188	6-32	¼"	³⁄₃₂"	30	.39
26 A 1193	8-32	¼"	³⁄₃₂"	30	.39
26 A 1187	10-32	⅜"	⁵⁄₆₄"	30	.39

Black Rubber Grommets. Soft rubber. Fit chassis up to ¹⁄₁₆". Av. wt., 2 oz.

Stock No.	Mtg. Hole	Inner Dia.	Overall Dia.	Quantity	PER PKG.
26 A 1212	¼"	⅛"	¹¹⁄₃₂"	16	.39
26 A 1213	⁵⁄₁₆"	³⁄₁₆"	⁷⁄₁₆"	14	.39
26 A 1214	⅜"	¼"	⁹⁄₁₆"	12	.39
26 A 1215	½"	⅜"	⅝"	10	.39
26 A 2708	⅝"	½"	¹³⁄₁₆"	8	.39

ware assortments supplied in handy clear-plastic case

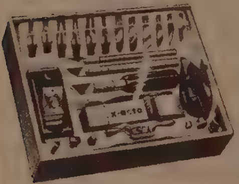
Tools, Sets for the hobbyi



29^{50}

X-Acto 88N Hobby Den Tool Cabinet

Fitted wooden cabinet, see-thru cover. Includes: 3 knives with blades; 6 blades; 6 gouges; 4 routers; 2 punches; saw, 4 blades; planer; sander; file; vise; hammer; pliers; 2 screwdrivers; tweezer; 2 chucks; drill bit; 2 screwdriver bits; 5 clamps; project book.
26 A 2590 X. Wt., 8 lbs..........29.50



X-Acto 84 Knife and Tool Set

11^{25}

Includes Nos. 1, 2 and 5 knives plus complete assortment of blades, gouges, routers, punches; planer; 1″ sander; spokeshave; balsa stripper. Wooden box has see-thru cover, fitted plastic tray insert. Shpg. wt., 2½ lbs.
26 A 2619......................11.25

4^{49}

X-Acto cordless Hobby Drill

Battery-powered, ideal for models. Drills plastic, wood, light metal; grinds, polishes, carves. 3 collets, punch, grinder. Order 2 batteries.
26 A 2438. Shpg. wt., 1 lb.........4.49
18 A 5078. "C" Batt. 10 oz...2 for 33¢

BADGER
HOBBY and TOUCH UP
AIR-BRUSH

Hobbyist Air Brush Sprayer

19^{95}

- Easy to use, clean
- No AC required
- Spray adjustment

Single-action air brush has metal parts with Teflon bearings and seals. Includes sprayer, 6-ft. vinyl air hose, 2 cans of propellent (½-hour spraying each), on-off valve, 1-oz. paint jar, two ½-oz. jars.
26 A 2662 X. Wt., 5 lbs..........................19.95
26 A 2698. **Extra Propellent.** 1½ lbs.....Pkg. 2 for 3.98

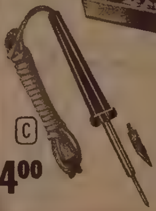
49^{95} **A X-Acto 99 su**
65-piece Tool

Contains a complete assortm
hobby tools, knives and
fitted into a handsome Phil
Mahogany cabinet. Provides
pact, convenient storage f
your hobby tools. Cabine
drawer storage for small
Overall size, 19x13x5½″.
26 A 2656 X. Wt., 13½ lbs..

18^{95} B

B X-Acto 87 Knife and Tool

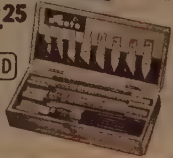
Includes Nos. 1, 2 and 6 k
assorted blades, gouges, ro
punches; plus planer, sander
bycraft saw, spokeshave,
stripper, steel rule, pin
screwdriver, assorted drill
In fitted wood chest.
26 A 2660. Wt., 3½ lbs..



C 4^{00}

C Soldering Iron/Hot K

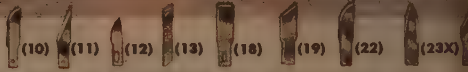
X-Acto 378. Compact 25-W
for hobby, electronics work. H
remains cool. Pre-tinned,
tip. Knife cuts through pl
clears surfaces rapidly.
26 A 1448. Wt., 2¼ lbs...



4^{25} D

D Multi-purpose Knife C

X-Acto 82. Low-cost set in
Nos. 1, 2 and 5 knives with
assorted extra blades. In
neutral-finish wood chest.
26 A 2522. Wt., 12 oz.......



E X-acto No. 1 Knife. For light to med. use. Aluminum. 5″. With #11 blade.
26 A 2523. Wt., 5 oz.........59¢

Pkg. of 5 Blades for above. 2 oz.

Stock No.	Type	Pkg.
26 A 2836	10 Eraser	.53
26 A 2837	11 Fine Angle	.53
26 A 2838	12 Correction	.53
26 A 2839	13 Plastic Saw	.53

F No. 2 Knife. Med. to
duty. With #22 blade.
26 A 2526. 5″. Wt., 5 oz..

Pkg. of 5 Blades for above

Stock No.	Type
26 A 2840	18 Chisel, ½″
26 A 2859	19 Deburring
26 A 2860	22 Trimming
26 A 2866	23X Dual Edge
26 A 2871	24 Close Corn

24″ flexible-shaft elec
Hobby Tool 24-pc. Set

19^{95}

Bench-top power tool has 1/60 hp 3000 rpm sh
pole motor with 2-ft. flexible shaft and hand
Includes: 2 sanding bands; 2 sanding discs; poli
buff; cutting disc; mandrels; 6 drills with collets
1/32″, 3/64″, 1/16″, 5/64″ and 3/32″); case. 120 VAC.
26 A 2669 X. Shpg. wt., 1 lb.....................

Precision Tools for home and shop

with
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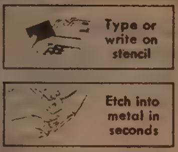
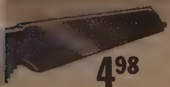

Type or write on stencil
Etch into metal in seconds

O-Matic Marking Kit

ıes, designs, numbers into
ıy metal by typing, writ-
ing or die imprinting on
encil. 110 VAC. Wt., 1 lb.
5 . . . . 19.95



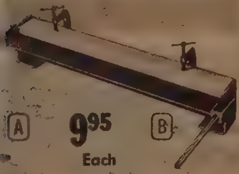
4.98

ermogrip Glue Gun

id glue stick in gun, it's
ıd melted and glue feeds
Permanent, waterproof
0 seconds—no clamping.
e sticks, sealer-sticks for
115 V AC-DC.
. Wt., 1 lb. 4.98
. Extra 1⅝" Glue Sticks.
. . . Pkg. of 60 for 1.98
. Extra 1⅝" Sealer Sticks.
. . . . Pkg. of 60 for 1.98

ole
ted
er

d light frame adjust to
height and visual range.
:2", adjusts from 1" to
h. Aluminum stand, 5"x
t., 1¼ lbs.
1 . . . . 9.95



9.95 Each

4-In-1 Metalworker

ngles to 90° in flat or rod
16-gauge, 1" wide; shears;
unches. With 3 punches.
0. Wt., 6 lbs. 9.95

Metal forming Brake

erfect bends and contours
to 16-gauge; bends to 90°.
ss, sharpness adjustment.
2. Wt., 9 lbs. 9.95

11.95

Dremel Model 290 Engraver

Easy to use as a pencil. Even engraves glass. 5-speed adjustment for stroke length, depth. Hi-speed reciprocating motor. Nylon. With case, carbide point. 110-120 VAC.
26 A 2405. Wt., 1½ lbs. 11.95

With Pins 3.29

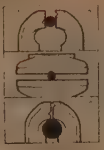
Concrete Fastener

No drilling! Anchor wood or light metal to concrete with 5 hammer taps. Piston concentrates hammer force. With asstd. driver pins.
26 A 2425. Wt., 12 oz. 3.29
26 A 2426. ¾" Pin. Fastens conduit, straps. 8 oz. . . . . Pkg. 19/79¢
26 A 2427. 1½" Pin. Furring strips to concrete. 8 oz. . . . . . Pkg. 10/79¢
26 A 2428. 2½" Pin. For 2x4" planks to concrete. 8 oz. . . . . . . Pkg. 9/79¢
26 A 2429. ¼"-20 Threaded Stud. For concrete. 8 oz. . . . . Pkg. 10/79¢

Vacu-Vise with swivel action

16.95

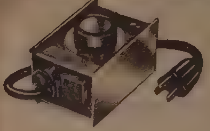
For industry, schools, hobby use. Swivels to any position, adjusts to any angle. Fastens instantly; no screws or clamps needed. Practical . . . moderately priced, too.
26 A 1542. Wt., 5 lbs. 16.95



14.95

Hobbyist's precision Flexi-Vise

Universal 3-way vise rotates work 360° in any plane. Cantilever design for stability; non-skid base. Spring-assisted V-groove aluminum jaws give firm, safe grip; 1¹⁄₁₆" capacity; neoprene liners.
26 A 2589. Wt., 2 lbs. 14.95

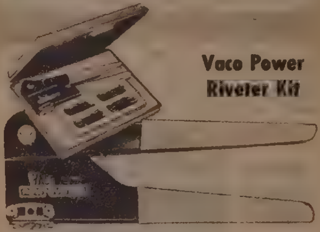


Lutron Mark II

Low as 11.95

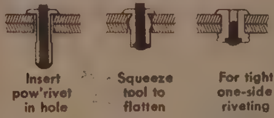
Power Tool Speed Control

Varies speed of drill, saw, etc. from "off" to full. For up to 5 amp univ. (AC-DC) and series DC motors only. 900 W max. 115 VAC.
26 A 1836. Wt., 1½ lbs. 11.95
26 A 2434. Up to 10 amp. . . . 17.95



Vaco Power Riveter Kit

Exclusive "bubble action" assures positive fastening every time



7.95
- With Pow'Rivets
- Rivets ½" thick

575100. Simple squeeze gives neat, tight riveting from one side of work. 4-way head takes any size blind rivet. Includes Rivetool, 55 assorted rivets, plastic case.
26 A 2556. Wt., 2 lbs. 7.95
Model 495 Rivetool Only.
26 A 2549. Wt., 1 lb. 4.95
Pow'Rivets. Clamp-up action. 8 oz.

Stock No.	Dia.	Lgth.	Qty.	BOX
26 A 2566	⅛"	.400"	50	.89
26 A 2576	5⁄32"	.470"	32	.89
26 A 2580	3⁄16"	.530"	27	.89
26 A 2581	3⁄16"	.720"	22	.89

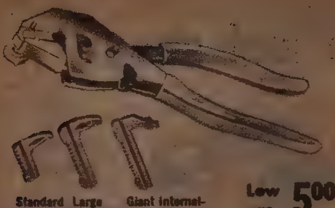
9.95

Dremel electric Scroll Saw

- Cuts in any direction
- Cuts wood to ¾" thick

Cuts scrolls, angles and curves in wood to ¾" thick, tile, light metal. Thin, fast blade leaves smooth wood. Cuts in any direction—9½" deep throat. For 115 VAC.
26 A 2436. Wt., 3 lbs. 9.95
26 A 2437. Pkg. 10 Blades. 2 oz. 98¢

Values in quality Hand Too



Low as 5.00

Vaco Plierench multi-purpose Tool

Replaces most wrenches and pliers. Grips any surface—round, hex or square—fits all U.S.S. or metric sizes. Forged steel. 7" long.
26 A 2118. Shpg. wt., 1½ lbs.....5.00

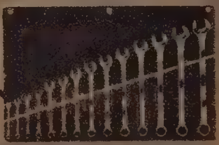
Deluxe 8½" Plierench. Up to one ton of gripping power. Access. jaws below.
26 A 2119. Shpg. wt., 2 lbs.......6.35

26 A 2120. Standard Pipe Wrench Jaw. Shpg. wt., 6 oz.................1.40

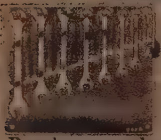
26 A 2121. Large Pipe Wrench Jaw. Shpg. wt., 6 oz.................1.40

26 A 2122. Giant Internal-External Jaw. Shpg. wt., 6 oz.................1.60

HUSKY WRENCH SETS



14 Pieces 24.95



8 Pieces 9.95

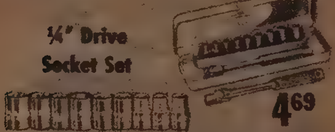
Popular wrench sets packaged in handsome vinyl plastic roll cases. Cases are grommeted for hanging.

A 14-Piece Combination Set. One end open-end, other end box. Includes: 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 5/16", 1", 1 1/16", 1 1/8", 1 1/4". Vinyl case. Shpg. wt., 10 lbs.
26 A 2535. *$5 Monthly*..........24.95

11-Piece Combination Set. (Not illus.) One end open-end, other end box. 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1". Vinyl roll case. Shpg. wt., 5 lbs.
26 A 2539.......................15.95

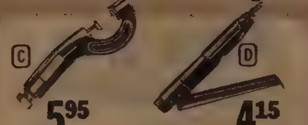
B 8-Piece Open End Set. Both ends open-end. Includes: 1/4x5/16", 3/8x7/16", 1/2x9/16", 19/32x11/16", 5/8x3/4", 25/32x13/16", 3/4x7/8", 15/16x1". Case. Shpg. wt., 2 lbs.
26 A 2536.......................9.95

¼" Drive Socket Set



4.69

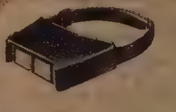
Low priced 11-piece socket set for those small jobs around the house. Consists of: six 6-point sockets—1/4", 9/32", 5/16", 11/32", 3/8", and 7/16"; three 8-point sockets—1/4", 5/16", and 3/8"; 6" flex handle. Complete with metal tool box, 6 13/16x2 5/16x1 1/4". Shpg. wt., 1 lb.
26 A 1429.......................4.69



5.95 4.15

C HP Model 500 Nut-Cracking Tool. Cracks nuts from 5/16" to 13/16". Easy to use, provides up to 25,000 lbs. pressure. Shpg. wt., 1¼ lbs.
26 A 1583.......................5.95

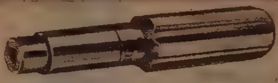
D Adel Metal "Nibbling" Tool. "Nibbles" openings in 18-ga. steel, aluminum, or other soft metals up to 1/16" thick. 8 oz.
26 A 1153.......................4.15
26 A 1130. Extra Punch. 2 oz....2.12



3-Dimension Magnifiers

Low As 4.95

Lightweight binocular 3-D magnifiers provide up to 3½ X magnificaton. Feature precision ground and polished prismatic lens. Adjustable headband for comfortable fit. You choose from three different magnification powers. Shpg. wt., 1 lb.
26 A 3616. 2¼X 10" focus....4.95
26 A 3617. 2¾X 8" focus.....5.95
26 A 3618. 3½X 4" focus.....5.95

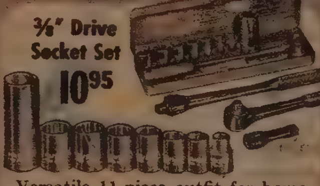


Adjustable Socket Wrench

2.49
- Press—adjusts to size
- 7 Sizes: ¼" to 7/16"

Just press and turn, wrench automatically adjusts to any of seven commonly used hex sizes from ¼" to 7/16". Durable chrome-plated housng. Shockproof insulated handle grips easily. Overall length, 5¾". Shpg. wt., 8 oz.
26 A 3279.......................2.49

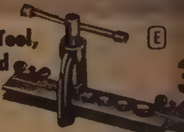
⅜" Drive Socket Set

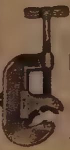


10.95

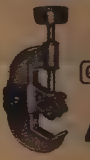
Versatile 11-piece outfit for home or shop. Includes: four 6-pt. sockets—3/8", 7/16", 1/2", 9/16"; three 12-pt. sockets—5/8", 11/16", 3/4"; socket extension; reversible ratchet; 10" flex handle; metal storage box, 10x3 5/8x1 1/8". Shpg. wt., 3 lbs.
26 A 2008.......................10.95

Flaring Tool, Tube and Pipe Cutters





2.19

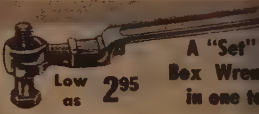


4.59

E Flaring Tool. Quality constru tool makes SAE 45° flare on to 5/8" O.D. soft copper, brass, aluminum tubing without crac or splitting. Shpg. wt., 2 lbs.
26 A 2139.......................

F Tubing Cutter. High quality ter cuts hard or soft 1/8"- O.D. copper, brass, aluminum, thinwall conduit. Meets Fe Specifications. Has retract reamer blade. Shpg. wt., ½
26 A 2140.......................

G Combination Tubing and Cutter. Combination tool e cuts tubes and pipes. Cuts 5/8"- copper, brass, aluminum, wall conduit; 3/8-1" iron and pipe. Shpg. wt., 2 lbs.
26 A 2141.......................



A "Set" Box Wre in one t

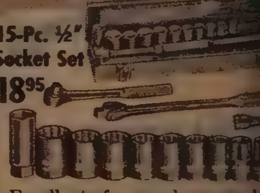
Low as 2.95

Adjusts from ¼" to 1". Na head for extremely tight s Tightly grips even burred damaged nuts. Forged alloy nickel-chrome finish. 8" han
26 A 2982. Shpg. wt., 8 oz...

Above, but has 10" handle and justs from 3/8" to 1 1/8".
26 A 2983. Shpg. wt., 14 oz...

Extra large. Has 12" handle adjusts from 7/16" to 1 7/16".
26 A 2984. Shpg. wt., 21 oz...

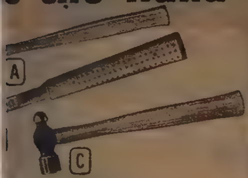
15-Pc. ½" Socket Set



18.95

Excellent for work around house. Set consists of: three sockets—7/16 to 9/16"; seven 1 sockets—5/8 to 1"; 13/16" spark socket; 5" socket extension; r sible ratchet; 15" flex ha metal box, 15¼x4x2".
26 A 2329. Shpg. wt., 10 lbs.

t the Hand Tools you need now

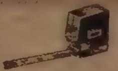


mmers to fit every need

-Face Hammer. $1\frac{3}{8}$" dia. red
l and amber tenite faces.
ead, hickory handle. $12\frac{3}{4}$".
61. Shpg. wt., 1 lb......3.44

w Hammer. One-piece steel,
ber-cushioned handle. 13".
299. Shpg. wt., $1\frac{1}{2}$ lbs. 3.53

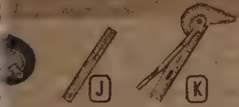
Peen Hammer. Drop-forged
l; hickory handle. 14".
577. Shpg. wt., $1\frac{1}{2}$ lbs. 1.98



n "Lokmatic" pe Rules

Lok, ball-bearing rewind,
oks, $\frac{1}{16}$" graduations. Vinyl,
case. Width, $\frac{1}{2}$" except *$\frac{3}{4}$".

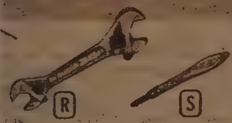
No.	Type	Feet	Oz.	EACH
045	W728	8	7	1.80
046	W7210	10	8	2.07
047	W7212	12	8	2.47
048	W7312*	12	10	3.33
049	W7316*	16	10	3.97



in White-Clad Tape. 50' steel
e. Black figures on white.
184. Shpg. wt., 1 lb......4.97
185. Above. 100'. 2 lbs. 6.90

ule and Wire Gauge. Gradu-
d in 32nds and 64ths. B&S
auge, decimal equivalents.
320. Shpg. wt., 2 oz......55¢

ltipurpose 4" Rule. 32nds,
hs, mm; protractor; square;
auge; tape-drill table.
329. Shpg. wt., 4 oz......1.47

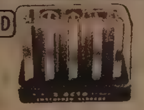


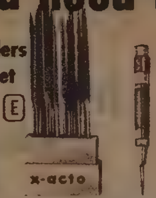
ry Hanson 120 Hand Reamer.
h quality hand reamer $5\frac{1}{2}$"
$\frac{1}{2}$"-diameter shank, $\frac{1}{8}$"
Made of high-carbon steel.
390. Shpg. wt., 9 oz......1.49

Adjustable Crescent Wrench.
ustable both ends; one end
her end $\frac{3}{4}$".
263. Shpg. wt., 6 oz......3.59

A 1382. Ctr. Punch. 5 oz...3.49
A 1383. Extra Point. 1 oz..47¢

Contoured Sanders Needle File Set

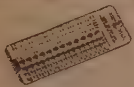




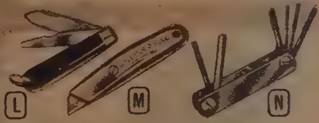
D X-acto 351 Contoured Sanders. Precision sanding in metal, plastic, and wood. Unique kit offers 5 different sanding heads with grip-tight handles. Includes an assortment of precut sheets of plastc-backed sandpaper. Shpg. wt., 8 oz.
26 A 2493....................3.95

E X-acto 60S-ST Swiss Needle File Set. Set of 12 assorted styles.
26 A 2519. Shpg. wt., 8 oz......5.95

Drill and Steel-Wire Gauge



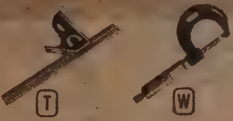
Drill, tap, and steel-wire gauge. Gauges and gives decimal measurement equivalents for wire sizes 1 to 60, tap and drill sizes 2-56 to $\frac{1}{4}$-28. Shpg. wt., 5 oz.
26 A 1319....................1.69



L Electricians Knife. Knife, screwdriver, and wirescraper. $2\frac{1}{2}$" long tool-steel blades.
26 A 1424. Shpg. wt., 5 oz......1.49

M Millers Falls Utility Knife. Five inches long. Five blades.
26 A 2655. Shpg. wt., $\frac{1}{2}$ lb....83¢
26 A 1171. 5 Extra Blades. 2 oz. 37¢

N Hex-Key Wrench Set. Folds like pocket knife. Hardened nickel-chrome steel. Shpg. wt., 4 oz.
26 A 1128....................98¢



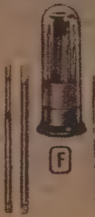
T Corsair 12" Combination Square. Try/miter square, depth gauge, plumb, and level. Locks at any point. Shpg. wt., 8 oz.
26 A 1308....................84¢

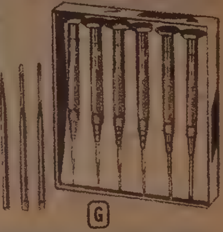
W Economy 1" Micrometer. Accuracy to 0.0005" in full-range micrometer. Screw-type anvil permits simplified zero adjustment. Factory adjusted. Japan.
26 A 2132. Shpg. wt., 8 oz....4.95

Moody precision Tiny Tool Set

36 pieces **14.95**
- 6 different sets
- Leather-like case

6 different sets, each with its own chuck handle, plastic case. 4 screwdrivers (.05", .07", .08", .1"); 1" awl; 2 Phillips screwdrivers (#0, 1); 3 Allen wrenches (#4, 6, 8); OE-5 open-end wrench set and TS-5 tap set, below; SW-5 socket wrench set (nonmagnetic); 5 matching tap drills. All sets in leather-like case. Shpg. wt., 2 lbs.
26 A 2022....................14.95





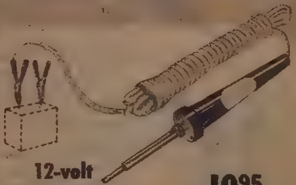
F SC-5 Screwdriver Set. .055", .070", .080", .100", Awl. Chuck handle. Plastic case. Shpg. wt., 5 oz.
26 A 1152....................Per Set 1.29

OE-5 Open-End Wrench Set. Offset. Steel. Chuck handle $\frac{5}{64}$", $\frac{3}{32}$", $\frac{7}{64}$", $\frac{1}{8}$", $\frac{5}{32}$". Plastic case. Wt., 5 oz.
26 A 1126....................Per Set 1.64

TS-5 Tiny Tap Set. Sizes: 0-80, 1-72, 2-56, 3-48, 4-40; handle. Wt., 5 oz.
26 A 1647....................Per Set 4.95

BW-5 Magnetic Socket Wrench Set. Magnetized handles. $\frac{5}{64}$", $\frac{3}{32}$", $\frac{7}{64}$", $\frac{1}{8}$", $\frac{5}{32}$"; handle, case. Wt., 5 oz.
26 A 2021....................Per Set 2.59

G JS-6 Jeweler's Screwdriver Set. Set has six precision-made jeweler's drivers in a sturdy case. With heat-treated steel blades, knurled handles. Blade sizes are: .025", .040", .055", .070", .080" and .1". Wt., 8 oz.
26 A 1384....................Per Set 2.89



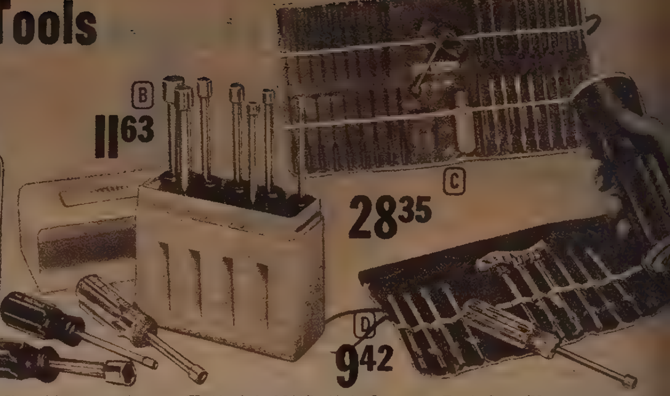
12-volt Solder Iron

10.95

Operates from 12-V battery or 12- 14 V AC/DC source. Tip temperature control. Low drain, only 2.5 to 2.9 amps, 30-41 W. 700°F $\frac{3}{16}$" screwdriver tip, battery clips, 12-ft. cord. $7\frac{1}{2}$".
26 A 2168. Shpg. wt., 2 lbs. 10.95

Xcelite Tools

26^{85}
A
Vinyl-coated roll-up case



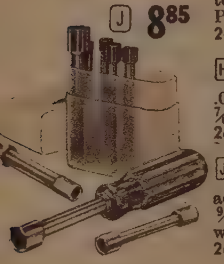
[A] **Model 99SM Service Master Tool Set.** Provides a variety of tools and combinations to speed-up work. Set includes: long-nose pliers; 6" adjustable wrench; 9 regular nutdrivers from 3/16" thru 1/2"; 1/4", 5/16", 3/8" stubby nutdrivers; 3/16" and 1/4" slotted screwdrivers; #1 Phillips screwdriver; 1/8" to 3/8" reamer; 1/4" to 1/2" reamer; 8" extension. Vinyl-coated canvas roll-up case.
26 A 1162. Shpg. wt., 2 3/4 lbs. **26.85**

[B] **Model HS6-18 Hollow-Shaft Nutdriver Set.** Ten nutdrivers in a rugged carrying case. Super-tough cold-drawn, case-hardened sockets. High-carbon steel shafts are polished and plated. Shock and breakproof plastic handles color-coded and marked with large numbers. Sizes from 3/16" thru 3/8" in 1/32" steps. Also 7/16", 1/2", and 9/16".
26 A 1199. Shpg. wt., 1 1/2 lbs. **11.63**

[C] **Model 99MP Multi-Purpose Tool Set.** Your most-often-needed tools are readily available in this convenient 39-piece set. Includes: 10 regular nutdrivers, 9 Allen hex typ screwdrivers, 9 Bristol multiple spline screwdrivers, 3 slotted screwdrivers, 2 Phillips screwdrivers, 2 reamers, 1 awl/scriber, 1 extension blade, 1 regular handle, 1 Te handle, and vinyl-coated canvas roll-up case.
26 A 1507. Shpg. wt., 3 1/2 lbs. **28.3**

[D] **Model 99PR Screwdriver/Nutdriver Set.** A grand total of 14 pieces in a handy roll-up vinyl pouch. Includes: 9 nutdrivers in sizes from 3/16" thru 1/2" in 1/32" steps; 2 single-end screwdrivers, 3/16", 1/4"; 2 single-end Phillips, Nos. 1 and 2. Shockproof and breakproof Plastic handles. All have chrome-plated shafts and blades to resist corrosion.
26 A 1259. Shpg.wt., 2 lbs. **9.42**

Allen Wrench, Nutdriver, Screwdriver Sets



[E] **99PS-40 Allen Screwdriver Set.** Includes breakproof handle; 4" extension; 9 blades, 3/64" to 5/32" in 1/64" steps, also 3/16".
26 A 1757. Wt., 12 oz. **7.10**

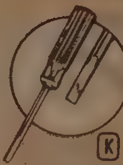
[F] **PS88 Screwdriver Set.** 5 slot-tip types from 3/32" to 1/4"; 3 Phillips drivers, #0, #1, #2; 1x3 1/8" standard handle. 3 1/2" drivers.
26 A 2579. Wt., 11 oz. **4.20**

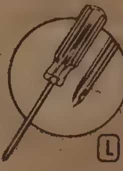
[G] **PS120 Nutdriver Set.** Includes: 10 color-coded drivers from 3/32" to 3/8" in 1/32" steps. 3 1/2" drivers. Plastic case fits pocket.
26 A 2194. Wt., 11 oz. **5.85**

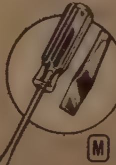
[H] **PS-89 Screwdriver Set.** 8 midget Allen hex type screwdriver, .028", .035", .050", 1/16", 5/64", 3/32", 7/64", 1/8". Torque amplifier handle.
26 A 2939. Wt., 1 1/2 lbs. **4.35**

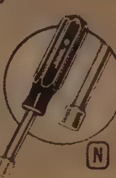
[J] **HSC-1 Nutdriver Set.** Eight 4 1/8" nutdrivers with hollow shaft to accommodate screwdriver. 3/16" to 9/16". Break-and shockproof handle, with plastic case.
26 A 2040. Wt., 12 oz. **8.85**

Set-screw, Phillips, round-shaft Screwdrivers









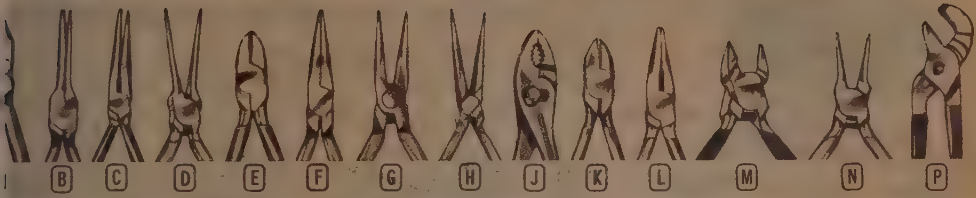
[K] **Set-Screw type Screwdrivers. 2 oz.**

Stock No.	Type	Shaft Size		O'all	EACH
		Dia.	Lgth.	Lgth.	
26 A 1129	R-3323SS	3/32"	3"	5"	.39
26 A 1136	R-184SS	1/8"	4"	6"	.45
[L] Phillips Screwdrivers. *Pocket clip. 6 oz					
26 A 1223	P-12S*	No. 0	2"	4"	.45
26 A 1155	X-108	No. 1	6"	10"	.90
26 A 1156	X-102	No. 2	4"	7 3/4"	.96
26 A 1158	X-103	No. 3	6"	10"	1.35
[M] Round-Shaft Screwdrivers. 5 oz.					
26 A 1142	R-182	1/8"	2"	4 1/2"	.39
26 A 1147	R-184	1/8"	4"	6 1/2"	.45
26 A 1148	R-186	1/8"	6"	8 1/2"	.51
26 A 1150	R-188	1/8"	8"	10 1/2"	.60
26 A 1279	R-144	1/4"	3"	8"	.3
26 A 1280	R-146	1/4"	6"	10"	1.02
26 A 1281	R-148	1/4"	7"	12"	1.08
26 A 3281	R-3163	3/16"	3"	6 5/8"	.66
26 A 3282	R-3164	3/16"	4"	7 5/8"	.72
26 A 3283	R-3166	3/16"	6"	9 5/8"	.81
26 A 3284	R-3168	3/16"	8"	11 5/8"	.90

[N] **Color-Coded Hex Nutdrivers.** Standard-type with lightweight hollow shafts. Types HS-6, 7 are 6 1/4" long overall. Types HS-8, 9, 10, 11, and 12 are 7" long overall. Types HS-14, 16, and 20 are 7 1/4" long overall. Shpg. wt., 6 oz.

Stock No.	Mfr's Type	Hex Size	Color	EACH
26 A 1648	HS-6	3/16"	Black	.99
26 A 1649	HS-7	7/32"	Brown	.99
26 A 1264	HS-8	1/4"	Red	.99
26 A 1646	HS-9	9/32"	Orange	.99
26 A 1265	HS-10	5/16"	Amber	.99
26 A 1266	HS-11	11/32"	Green	.99
26 A 1267	HS-12	3/8"	Blue	.99
26 A 1268	HS-14	7/16"	Brown	1.14
26 A 1269	HS-16	1/2"	Red	1.14
26 A 1271	HS-20	5/8"	Amber	1.35

liers and Tools for every home workshop



Precision Pliers and Cutters for any application

Professional-Quality—Allied Pliers and Cutters

forged from high-grade tool steel and heat treated for optimum temper. cushion grips for safety and comfort. All carry one year guarantee against ing. *Has cross coil spring. Made in U.S.A. to Allied's specifications.

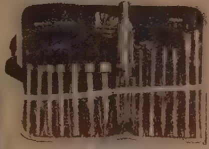
ck	Fig.	Length	Description	Wt., oz.	EACH 1-4	EACH 5-Up
900	A	6½″	Electrician's Side Cutting Pliers	8	2.88	2.60
901	A	8″	Electrician's Side Cutting Pliers	16	3.58	3.23
908	B	6″	Long Needle or Snip Nose Pliers	6	2.82	2.54
912	C	7″	Extra Long Chain Nose Cutting Pliers	6	4.10	3.74
915	D	6″	*Long Nose Pliers	3	3.78	3.42
902	E	4½″	Diagonal "Oblique" Cutting Pliers	2	2.55	2.30
903	E	5″	Diagonal "Oblique" Cutting Pliers	3	2.65	2.39
904	E	6″	Diagonal "Oblique" Cutting Pliers	3	2.87	2.57
910	F	6″	Long Chain Needle Nose Pliers	3	2.47	2.25
909	F	6″	Long Chain Needle Nose Pliers	3	2.95	2.68
913	G	5″	*Radio and Ignition Nose-Cutting Pliers	3	3.68	3.32
916	H	7″	*Extra Fine Long Nose Pliers	3	2.99	2.69
924	J	6″	Satin Finish Combination Pliers	5	.92	.83
925	J	8″	Satin Finish Combination Pliers	9	1.21	.87
926	J	6″	Satin Finish Thin Nose Combination Pliers	5	1.46	1.30
905	K	4½″	Diagonal Needle Point Cutting Pliers	2	3.60	3.23
906	K	5″	Diagonal Needle Point Cutting Pliers	3	3.63	3.25
911	L	5″	Short Chain Needle Nose Cutting Pliers	3	3.14	2.81
914	M	5″	*Slim Nose Pliers	3	3.39	3.05
917	N	4½″	*Needle Point Diagonal Flush Cut Pliers	6	3.48	3.13
927	P	10″	Tongue-and-Groove Utility Pliers	16	3.05	2.75

Popular low-priced Tool Sets for all needs

et 14-pc. Screw/Nutdriver Set

atures 3-way ratchet handle to eed work. Includes: seven nut- s, 3/16″ to ½″; No. 1 and No. 2 ips-head screwdrivers; three d screwdrivers; plus 5″ blade sion. In handy see-thru plastic . Shpg. wt., 2 lbs.

2236. . . . . .12.99



12.99 Y

nsulated Screwdriver Set

odel ZSD-5. In 5 popular sizes: ″, ¼″, 5/16″, 11/32″, and ⅜″. and breakproof plastic handles. ble plastic cover for use as roll, up, or stand-up kit.

1472. Wt., 1¼ lbs. 6.45

6.45 Z

Insulated Nutdriver Set

lodel ZND-5. Insulated nutdrivers esigned for quicker, easier work. popular sizes: 3/16″, ¼″, 5/16″, 11/32″, Shock and break-proof plastic les. Contained in durable vinyl for use as roll, hang-up, or -up kit.

1473. Wt., 1¼ lbs. 7.45

7.45 AA

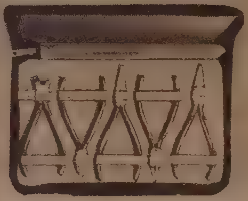
5-piece electronic Screwdriver Set

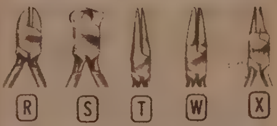
of 5 chrome vanadium blades with proof tenite handle that assures firm Each screwdriver blade has spring er to hold screw when starting. 5/32″ iameter on 4, 5, 6, 7 and 8″ blades. Roll- ouch. Shpg. Wt., 1 lb.

513. . . . . .3.98

5-pc. Set 3.98

Allied Jeweler's Plier Set





- Drop forged fine grain tool steel
- Comfortable vinyl cushion grips
- Zippered, leatherette carry case

Set of five professional 4½″ precision pliers (also sold individually below). Vinyl cushion grips. Smooth polished head and handle, drop forged fine grain tool steel. Fig. R for close cutting. Fig. S for end cutting. Figs. T, W, X have smooth jaws. Shpg. wt., 1¼ lbs. (Av. wt. of individual pliers, 5 oz.)

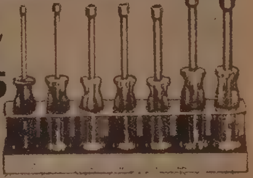
26 A 2918. 1-2 Sets. . . . . .Each 14.25
3 Sets Up. . . . . .Each 13.15

INDIVIDUAL JEWELER'S PLIERS

Stock No.	Fig.	Description	EACH 1-4	EACH 5-Up
26 A 2919	R	Diag. Cutter	2.70	2.40
26 A 2920	S	End Cutter	3.05	2.73
26 A 2921	T	Chain Nose	2.44	2.20
26 A 2922	W	Flat Nose	2.52	2.28
26 A 2923	X	Round Nose	2.54	2.28

With Sturdy Rack

6.95



Allied 8-Piece Nutdriver Set

Seven hex drivers, 3/16″ to ½″, in supporting rack. Color-coded handles, with nickel-chrome plated drivers. Made of drop forged tool steel, heat treated for maximum hardness. Shafts 6¼″, except 6⅞″ on 7/16″ and ½″ drivers.

26 A 1787. Wt., 1¾ lbs. 6.95

Fine quality Tools for home or shop

Ace 40-pc. Tap and Die Set

30^{95}
- Includes all popular sizes
- Hi-tempered alloy steel
- Unbreakable plastic case

Complete set of taps and dies, plus all essential accessories in a compact storage case. All popular sizes. Consists of one each, tap and die: 4-36, 6-32, 8-32, 10-24, 10-32, 12-24 (Machine Screw Standard); ¼-20, 5/16-18, ⅜-16, 7/16-14, ½-13 NC (U.S. Standard); ¼-28, 5/16-24, ⅜-24, 7/16-20, ½-20 NF (S.A.E. Standard); ⅛" pipe.

Also includes die stock, tap, and reamer wrench. "T" tap wrench, screwdriver, and pitch gauge. High-tempered alloy steel. Unbreakable plastic case with recessed pocket for each part. Wt., 4 lbs.

26 A 1391. . . . . .30.95

26 A 2848. S35P Screw Extractor Set. With extractor Nos. 1, 2, 3, 4, 5. Use with ¼" drill. 5 oz. 1.98

Greenlee Punches

Type 730 Round Punch Cuts holes in chassis, cabinets and panels. Cuts up to 16-gauge metal, bakelite, hard rubber. Wt., 1½ lbs.

Stock No.	Hole	Lead Size	EACH
26 A 1337	½"	¼"	2.85
26 A 1349	⅝"	¼"	2.85
26 A 1306	11/16"	⅜"	2.85
26 A 1340	¾"	⅜"	2.85
26 A 1342	⅞"	⅜"	2.85
26 A 1343	1"	⅜"	3.20
26 A 1344	1⅛"	⅜"	3.35
26 A 1347	1¼"	⅜"	3.35
26 A 1327	2"	¾"	8.35

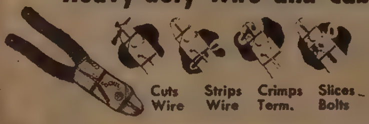
Ball-Bearing Drive Screws. Minimize effort needed to operate punches. Reduces drive screw friction. 1 lb.

26 A 1604. AV322-BB. 11/16"-⅞" . 1.25
26 A 1605. AV112-BB. 1"-1½" . . 1.35
26 A 1169. AV304-BB. 2" punch 3.40

Replacement Cap Screws. For all punches above. Shpg. wt., 2 oz.

Stock No.	Size	Punch Size	EACH
26 A 1376	¼"	½" and ⅝"	.30
26 A 1378	⅜"	11/16" to ⅞"	.30
26 A 1336	⅜"	1" to 1¼"	.35

Heavy-duty Wire and Cable Strippers/Bolt Slicer



Vaco 1963 Wire Cutter/Bolt Sl Cuts, strips 22 to 10 gauge w crimps insulated, non-insula terms. Slices 6 bolt sizes: 4 5-40, 6-32, 8-32, 10-32, 10-24. 26 A 2048. Wt., 1 lb. . . . .

SW-1 Wire Stripper

Ⓐ **K. Miller 101-S Wire Stripper.** Strips, cuts wire up to No. 8. Spring-lock holds blades closed when not in use. 5-inches long overall.
26 A 1392. Shpg. wt., 4 oz. 1.27

Ⓑ **K. Miller Coaxial Cable Stripper.** Strips, cuts and slits cable. Has adjustable blades for RG59U coaxial cable. Shpg. wt., 8 oz.
26 A 1339. . . . . .13.75

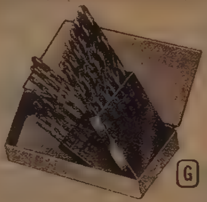
Ⓒ **G-C Wire Stripper Kit.** Includes Model 766 wire stripper; 7 blades. For No. 8 to 30 gauge wire. Plastic case. Wt., 2¼ lbs.
26 A 1389. . . . . .13.16
26 A 1387. 766. Stripper Alone. For 12-20 wire. Shpg. wt., 1¼ lbs. . . .5.93
26 A 1388. 766A. Stripper Alone. For 14-30 wire. Wt., 1¼ lbs. 5.93

Ⓓ **G-C 802 Wire Stripper.** Autom stop, return. Has wire cutter. No. 10-22 wires.
26 A 1341. Shpg. wt., 8 oz. . . . . . .

Ⓔ **Blonder-Tongue Coaxial Cable St per.** Strips cable up to ½-inch ameter. Scale for exact stripp measurements. Uses single-edge ra blade. Holds cable under spring sion. Heavy steel construction.
26 A 2169. Shpg. wt., 4 oz. . . . . . .

Ⓕ **Utica SW-1 "Stripwright" Wire St per.** Strips Teflon® and ma other wire and cable insulations. Po tive cam-action adjusts to correct w sizes from No. 12 to No. 26. The id stripping tool for limited access ar Shpg. wt., 7 oz.
26 A 1680. 16

Precision high-speed Drill Bits



Ⓖ **15-Drill Set.** 1/16 to ½" in 32nds. Steel index.
26 A 2137. Wt., 2¼ lbs. 14.50

21-Drill Set. 1/16 to ⅜" in 64ths. Steel index. Wt., 1¾ lbs.
26 A 2173. .12.50

29-Drill Set. 1/16 to ½" in 64ths. Steel index. Wt., 3¾ lbs.
26 A 2200. .24.99

60-Number Size Drill Set. Sizes 1 to 60. Steel index. Wt., 1¼ lbs.
26 A 3244. .17.99

5-Piece Drill Set. ¼" shank. Sizes: ¼, 5/16, ⅜, 7/16, ½. Plastic pouch. Shpg. wt., 5 oz.
26 A 2208. . . . . .7.95

10-Piece Drill Set. 1/16, 5/64, 3/32, 7/64, ⅛, 9/64, 5/32, 3/16, 7/32, ¼". Steel index. Wt., 5 oz.
26 A 2254. . . . . .3.79

13-Drill Set. 1/16 to ¼" in 64ths. Steel index. Wt., 8 oz.
26 A 2277. . . . . .4.99

17-Drill Set. 1/16 to ¼" in 64ths; 5/16, ⅜, 7/16, ½". ¼" shank. Steel index.
26 A 2289. Wt., 2 lbs. 11.95

12-Piece Drill Set. Sizes from 1/16" ¼" in 64ths. Includes center pun With roll-up pouch.
26 A 3238. Shpg. wt., 9 oz. . . . .

13-Piece Drill Set. 1/16" to ½" in 32n Drill sizes over ¼" have ¼" sha With roll-up pouch.
26 A 3239. Shpg. wt., 3 lbs. . . 1

Ⓗ **Masonry Set.** ¼", 5/16", ⅜", Sizes over ¼" have ¼" shan
26 A 3248. Shpg. wt., 5 oz. . . . .

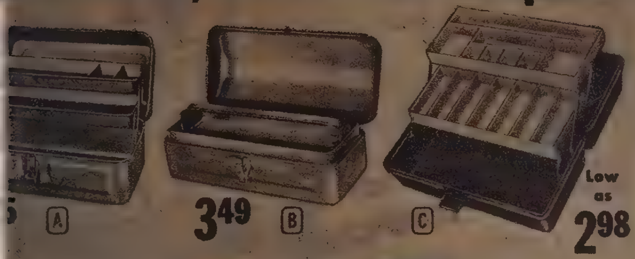
Ⓙ **Miniature Set.** Twenty drills fr No. 61 (.039") to No. 80 (.013
26 A 2291. Shpg. wt., 6 oz. 7

Ⓚ **General Hardware Circle Cutt** Round shanks fit drill pr square shanks fit hand brace. Pi drill keeps circle cutter center Cuts wood, plastic, steel. 8 oz.

Stock No.	Shank	Hole Size	EA
26 A 1245	Round ¼"	⅞-4"	2.
26 A 1246	Square	1-6"	2.
26 A 1247	Round 5/16"	1-6"	2.
26 A 1224	Round ½"	1-6"	2.
26 A 1225	Round ½"	1¾-8"	4.

26 A 1248. Extra Blades for Circle Cters. Av. shpg. wt., 4 oz. . . . . Each

ol Boxes, Vises and Staplers



Metal and plastic Tool and Utility Boxes

k Type 132 Metal Tool Box. All-purpose for tackle, tools, sewing. Two cantileys. Enamel finish. 5¾x13½x6½".
152 X. Shpg. wt., 5 lbs. 2.95

31. Above, one tray. 4½x13½x6½".
153 X. Shpg. wt., 3 lbs. 1.95

k Type 151-T. Metal, for hand tools. Lift-tray. Heavy-gauge steel, full-length clasp lock. Edges turned, welded. enamel. 4⅞x15x6½".
560 X. Shpg. wt., 4½ lbs. 3.49

C Vlchek Model 1212 "Crushproof" Plastic Tool Box. Guaranteed unbreakable. Has two trays, with 14 compartments. Top and bottom open flat, cannot tip. Unbreakable polypropylene. Rustproof hardware. Green. 6x12⅜x7".
26 A 1772 X. Wt., 2½ lbs. . 3.98

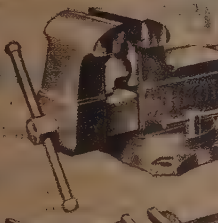
Model 1211. Above, but one tray. Green. 4⅝x12⅜x7".
26 A 3156 X. Wt., 2 lbs. . . . 2.98

ench Vises for home, shop and electronic work

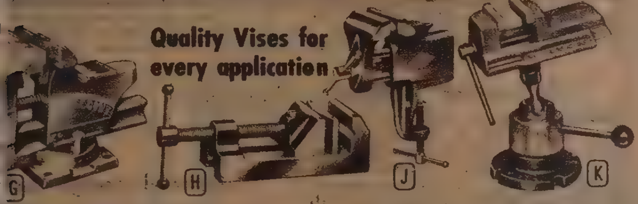
Wilton Vises for home workshops

purpose vises feature replaceable cap s, reinforced forming horn, swivel base, shed anvil, serrated steel replaceable top s. Also, 3⁄16" formed steel slide. Gray finish. dicates pipe capacity.

Stock No.	Mfr's Type	Jaw Width	Max. Open	*	Wt., Lbs.	EACH
2315 X	643½	3½"	4"	⅛-2"	19	12.45
2316 X	644	4¼"	4½"	⅛-2½"	26	18.95
2318 X	645	5"	5½"	⅛-2½"	34	21.55



Quality Vises for every application



lton C55. Serrated inserts, pipe jaws. ivels. Jaws, 4½" w., 3" d., open 4½".
489 X. Shpg. wt., 19 lbs. 7.95
203 X. C53½. Above, 3½" jaw. 11 lbs. 6.38

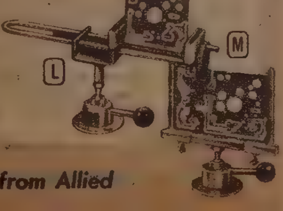
lers Falls Deluxe 217. Use on drill press; rk bench. Jaws, 2⅜" wide; faces ex-o 3⅛". Swivel jaw.
321. Shpg. wt., 5 lbs. 8.99

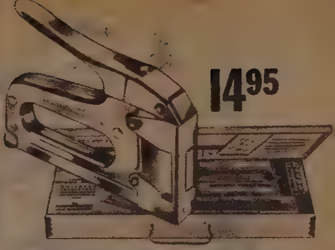
nk and Cotton 149 Hobbyist. Holds small rts. Clamps to bench up to 1¾" thick. 1¾" wide; open to 1¾".
317. Shpg. wt., 2¾ lbs. 1.99

lton Model 353 Electronics Vise with Po-oner. For small PC boards, etc. Rubber-d jaws. Bars adjust to 6½".
210. Shpg. wt., 3 lbs. 15.60

lton Model 371 PC Holder and Positioner. ackets adjust horizontally 3" to 6". al posts are V-grooved (⅛" wide, 3⁄16" Post height, 4".
211. Shpg. wt., 2 lbs. 12.55

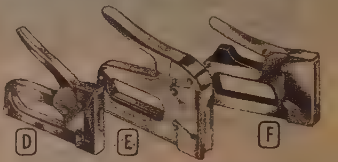
K Wilton Model 364 Vise and Positioner. The most convenient bench tool you can use to hold small parts secure. Single-handed control of "PowRarm" positioner leaves one hand free, permits rotating or tilting of work. Maximum work weight, 15 lbs. at 6-inches. Jaws open to 2¼-inches and are 2¼-inches wide. Shpg. wt., 5 lbs.
26 A 1149 . . . . 18.25





Arrow Complete Stapling Kit

T-50MP. Has T-50 stapler with powerful double-leverage action, jamproof mechanism. Mend screens, window shades; fasten ceiling tile, wire; hang party decorations—hundreds of uses. Includes: T-50 staple gun; screen, shade attachments; staple lifter; 2000—¼", 1000—⅜", 1000—½" staples; 1000 Ceil-Tile staples. T-50 uses ¼" to 9⁄16" staples. Extra staples below.
26 A 1466. Kit. Wt., 4¾ lbs. . . 14.95
26 A 2653. T-50 Staple Gun Alone. Shpg. wt., 2¼ lbs. 10.95
26 A 2190. T-50 Screen Attachment. Shpg. wt., 1 oz. 1.00
26 A 2191. T-50 Wire Attachment. Shpg. wt., 1 oz. 1.00
26 A 2192. T-50 Window Shade Attachment. Wt., 1 oz. 1.00
26 A 2193. SL-50 Staple Lifter. Shpg. wt., 1 oz. 1.00



D JT-21 JR. Low-priced stapling gun. Safety lock handle, staple extractor, visual refill aid. Loads 100—¼" staples. 3x6⅛x¾". Order staples below.
26 A 1249. Wt., 1 lb. 4.79
26 A 2180. Combination Wire/Screen Attachment for above. 1 oz. . . . . . 75¢

E T-55. Medium-duty gun. Similar to T-50. Non-pinch, easy-grip handle. Order staples below.
26 A 2307. Wt., 2 lbs. 7.95

Wire and Cable Staplers

F T-75. Heavy-duty gun handles up to ½" wire, cable, tubing. Flat crown staples hold firmly. Tapered striking edge for close corners. Order staples below
26 A 2314. Wt., 2¼ lbs. 13.95

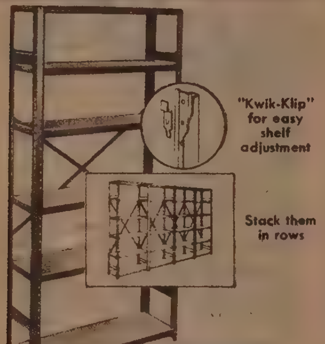
26 A 1467. T-25 Wire Stapler. For low-voltage ¼" wire. Grooved blade positions wire. 2¼ lbs. . 13.95

Arrow Gun Staples. *Indicates ceiling tile for T50, T55. Wt., 1 lb.

Stock No.	For Model	Size	Quantity	EA.
26 A 2337	T50, T55	¼"	5000	2.13
26 A 1273	T50, T55	⅜"	5000	2.34
26 A 2343	T50, T55	½"	5000	2.76
26 A 2654	T50, T55	*	5000	3.19
26 A 2344	JT-21	¼"	5000	2.65
26 A 2365	JT-21	5⁄16"	5000	2.65
26 A 2366	T-25	⅜"	5000	3.40
26 A 2387	T-25	9⁄16"	5000	3.83
26 A 2390	T-75	9⁄16"	1000	1.91
26 A 2409	T-75	⅝"	1000	1.91
26 A 2410	T-75	⅞"	1000	2.13

A
Hanging Shelf
4.98
40-Drawer Cabinet
B
17.95
C
2x5 ft. Workbench
19.95
Storage Racks
Low as 5.95
D

Edsal Workshop Equipment


"Kwik-Klip" for easy shelf adjustment
Stack them in rows
Low as 9.95

Deluxe all-steel Racks

All-purpose utility racks with hundreds of practical applications in home or industry. Assembles with simple hand tools—just bolt tops and bottoms together. "Kwik-Klip" fasteners secure the shelves to the frame, making each shelf completely and individually adjustable. Mounting holes in posts are at convenient 1" intervals. Each heavy-duty shelf supports up to 500 lbs. Rack has 5 shelves with upright brackets. Overall height: 75", width 36". Rust resistant Gray enamel. Knocked down.

With 12" Deep Shelves.
26 A 1783 U. Wt., 47 lbs............9.95

26 A 1784 Z. With 18" Deep Shelves. Shpg. wt., 60 lbs...............12.95

26 A 1781 X. 12" Shelf. 6 lbs...........1.69
26 A 1782 X. 18" Shelf. 8 lbs.........2.19

Ⓐ Steel hanging Shelf

A heavy-duty, all-steel hanging shelf for off the floor storage in garages, basements, workshop areas. Quickly assembled and hung on easy-to-mount wall brackets. Gray baked enamel finish. 12x30x25" high. Knocked down.
26 A 1942 X. Wt., 16 lbs...............4.98

Ⓑ Multi-drawer Cabinets

40-Drawer Cabinet. Holds everything from small tools to electronic components. Features 32 big 4x11" and 8 jumbo-sized 8x11" drawers. One-piece drawers of sturdy corrugated-board construction. Special stop-tab keeps drawers from being pushed in or pulled out too far. All-steel frame 37x36x12". Shpd. knocked-down.
26 A 2145 Z. Wt., 37 lbs............17.95

15-Drawer Cabinet. Similar to above, but with 12 drawers 4x11", 3 drawers 8x11". Overall size: 26x21x12".
26 A 2470 Z. Wt., 24 lbs...............6.98

2x4-ft. Bench with pegboard

2x4-ft. workbench has full-length pegboard tool and parts rack with enough room for a complete tool assortment. Has space for two storage drawers (not included, listed below). Work surface is 34½" from floor. Gray enamel finish. Knocked down.
26 A 1523 Z. Shpg. wt., 70 lbs....19.95

Steel Storage Drawer. Easily attached to either workbench listed above. Gray enamel finish. 3x12x20" deep. Shpg. wt., 12 lbs.
26 A 1524 X.....................Each 3.19

2x5-ft. steel-frame Bench

Ⓒ 2x5-ft. deluxe workbench featur a full 10 square feet of worki space. Can support over 200 lbs. p sq.-ft. 1" No-Mar top and sturdy on piece heavy-gauge welded steel le that take rough use in stride. Accor modates two drawers (not include listed below left). Work surface 34 from floor. Gray baked enamel ste parts fight rust and corrosion. Knock down. Shpg. wt., 76 lbs.
26 A 2563 Z.............................19.

Ⓓ All-steel storage Racks

Sturdy, all-steel storage racks ide for storing bulky and oversize item paint cans, bottles, cartons, etc. N unsightly sway braces. Accessible fro either side. Shelves are rust-proofe scratch and mar resistant. Can raised or lowered at 1½" intervals. screwdriver is all you need for asse bling. With hardware, post caps floor guards.

Storage Racks

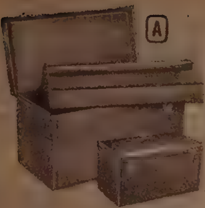
Stock No.	No. Shelves	HxWxD	Wt., Lbs.	EAC
26 A 2109 X	4	60x30x12"	18	5.9
26 A 2110 X	5	66x30x12"	22	6.9
26 A 2111 X	5	72x36x12"	25	7.9
26 A 2114 X	5	72x36x18"	34	9.9

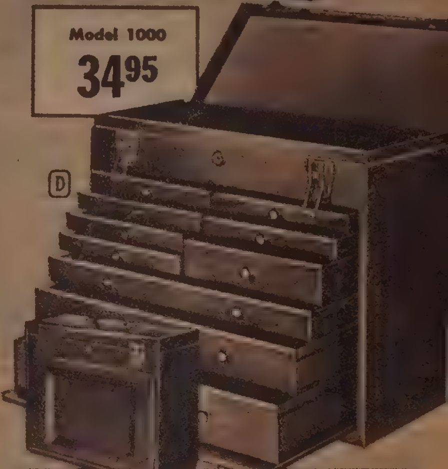
Extra Shelves for above racks

Stock No.	For Use With	Wt., Lbs.	EAC
26 A 2115 X	30x12" Units	5	1.4
26 A 2116 X	36x12" Units	7	1.5
26 A 2117 X	36x18" Units	9	1.9

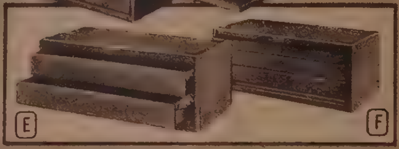
SHIPPING NOTE: Items with suffix U, W or Z in stock no. sent tru or express. See Ordering Information pag

Park heavy-duty Tool Boxes and achinists Chests





Model 1000
34⁹⁵



del 200F Mechanic's Tool Box. Extra-large, long, flat-top tool x for the millwright; tractor, auto and truck repairman; etc. a baked enamel finish. 11x20x10″.
560 X. Shpg. wt., 15½ lbs. 11.95

del 802 Government-Type Hip Roof Tool Box. Double-cover -style box. Twin handles prevent box from opening while carried. Can be padlocked through handles. Lift-out tray cket partition. Brown baked enamel finish. 7¼x21x8½″.
561 X. Shpg. wt., 11 lbs. 7.95

del P-23N Three-Drawer Machinist Chest. Drawers have full-pension slides; lock when cover is closed. Pushing drawer locks drawer even if cover is closed. 4″-high till in top for tools. Drawers each 1½″ high. Full-length hinge. Silicon-d baked green finish. 10¼x20x8½″.
506 X. Shpg. wt., 18 lbs. 12.95
149 X. **Model P-22 Two-Drawer Machinist Chest.** As above, but rawers. 9¾x20x8½″. Shpg. wt., 16 lbs. 11.95

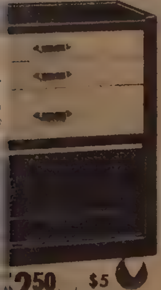
del 1000 Ten-Drawer Machinist Chest. Full-suspension drawer les allow full extension; drawers remove for cleaning. Re-ble front panel locks when cover is closed, stores in bottom rtment when open. One-piece drawbolts, plus pin tumbler Till in top, 4x20x8½″. 6 drawers are 1x8⅝x7½″. 4 others: x7½″; 1½x18¼x7½″; 2⅜x18¼x7½″; 3x18¼x7½″. Elec-y welded. Brown baked enamel finish. 17½x20x8½″.
507 U. Shpg. wt., 40 lbs. 34.95

700 Seven-Drawer Machinist Chest. As above, but has seven rs. Four drawers are 1x8⅝x7½″. Three others: 2x8⅝x7½″; 8¼x7½″; 2⅜x18¼x7½″. Size, 13¼x20x8½″.
508 U. Shpg. wt., 30 lbs. 29.95

A 3712 X. **Two-Drawer Add-On Chest.** For Model 1000 and del 700 above. 7¾x20x8½″. Shpg. wt., 15 lbs. 12.95

A 3739 X. **Three-Drawer Add-On Chest.** For Model 1000 and del 700 above. 7¾x20x8½″. Shpg. wt., 16 lbs 14.95

Rem Line top-quality Roller Cabinets and Tool Chests



2⁵⁰ $5 monthly*

wer Roller Cabinet

9002. Wrap-around uction, 4″ composi-sters. 16-gauge base. -to-front drawers, wide, 16¾″ deep. 2 rs, 2⅞″ high; one, Panel compartment, 2¼″. Lock, keys. 6¾x17″.
47 Z. 93 lbs. . . .52.50

79⁹⁵ $5 monthly*

7-drawer Roller Cabinet

Model 9502. Two top drawers, 10½x16¾x1¾″. Others, 21½″ wide, 16¾″ deep. Height: two, 1¾″; two, 2⅞″; one, 4½″. Panel compartment, 26¼x12½x17″. I-beam slides; chrome-plated pulls. Lock, keys. 38x26¾x17″.
26 A 3949 Z. 121 lbs. . .79.95

43⁵⁰
$5 monthly*

6-drawer Tool Chest

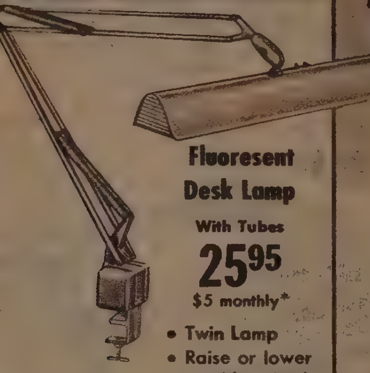
Model 1100. Two drawers, 1¾x5⅛x12½″; one, 1¾x11¼x12½″; two, 1¾x23⅝x12½″; one, 3¾x23⅝x12½″. Divided full-width top drawer; divided tote tray. Lock, keys. Red enamel drawers, charcoal finish. 15½x26x12⅝″.
26 A 3932 Z. 61 lbs. . . .43.50

69⁹⁵ $5 monthly*

12-drawer Tool Chest

Model 1160. Six drawers, 1¾x5⅛x12½″; three, 1¾x11¼x12½″; two, 1¾x23⅝x12½″; one, 3¾x23⅝x12½″. I-beam slides, positive stops. Divided tray. Lock, keys. Rolled steel, spot welded. Charcoal finish. 19⅝x26x12⅝″.
26 A 3945 Z. 85 lbs. . . .69.95

Adjustable Lamps for home and office



Fluoresent Desk Lamp

With Tubes

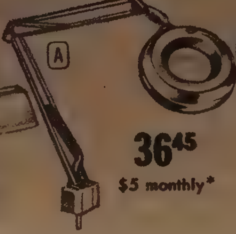
25^{95}

$5 monthly*

- Twin Lamp
- Raise or lower with a touch

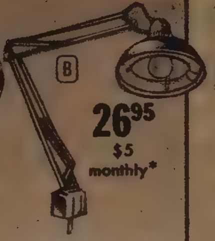
Luxo FL-1. Twin-light fluorescent lamp that's ideally suited for use in any office or home where a large area of bright, cool light is necessary. Lamp can be raised or lowered with a slight touch . . . yet arms are spring-controlled and counter-balanced to stay in place.

Lamp swivels full 360°, has 45″ reach. Gray enameled metal finish. Eight-ft. cord. Two type T8 Fluorescent Tubes included. Order mounting bracket desired, at right. U.L. Listed. For 117 VAC.
26 A 3166 X. Wt., 9 lbs. 25.95



36^{45}

$5 monthly*

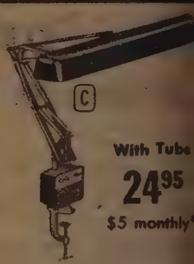


26^{95}

$5 monthly*

A Luxo LFM-1 Fluorescent Magnifier Lamp. Big 5″ magnifier lens is ideal for miniature assembly, inspection or reading fine print. Moves with a touch, yet stays in place. 360° swivel; 45″ reach. Gray finish. With T9 fluorescent tube. Order mtg. bracket below. U.L. Listed. 117 VAC.
26 A 3169 X. Shpg. wt., 8 lbs. 36.45

B Luxo LC-1 Combination Lamp. Has both fluorescent and incandescent lights . . use together or separately. 360° swivel; 45″ reach. Gray finish. With T9 tube, less incandescent bulb. Order mtg. bracket below. U.L. Listed. 117 VAC.
26 A 3167 X. Shpg. wt., 9 lbs. 26.95



With Tube

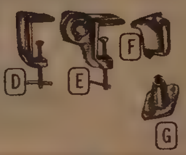
24^{95}

$5 monthly

C Marks Dual Fluoresce Lamp. Special HI-L switch: LO position fo normal light; HI positio increases light to almo that of a two tube lam Spring-action dual 12 arms, with set screw Cast metal "C" mt clamp. With tube. For 11 VAC.
26 A 3170 X. 7 lbs. . . 24.9

26 A 3171 X. Above, wit desk base. 12 lbs. . . . 27.9

Mounting Brackets for all Luxo Lamps

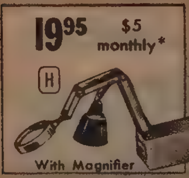


D Desk Clamp. For table or desk. Opens to 2¼″. Shpg. wt., 1 lb.
26 A 2992 . . . . 1.68

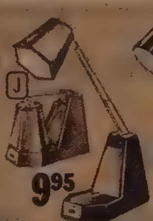
E Slanted Surface Clamp. Fits drafting board. Adjustable angle.
26 A 2995. Wt., 1 lb. . 2.62

F Screw Mount. For wal other vertical surfac Three mtg. holes.
26 A 2993. Wt., 1 lb. . 1.6

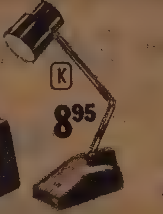
G Screw Mount. For des other level surface Two mounting holes.
26 A 2994. Wt., 1 lb. . 1.6



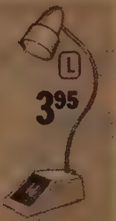
19^{95} $5 monthly*



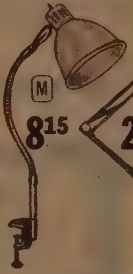
9^{95}



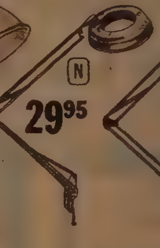
8^{95}



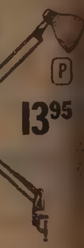
3^{95}



8^{15}



29^{95}



13^{95}

Low-voltage high-intensity Desk Lamps

Built-in transformer reduces voltage for cool, glare-free light

H Lamp/Magnifier. Two-power magnifier has 7″ focus; swivels vertically, rotates. Lamp also swivels, extends to 12″. Each moves independently. Hi-Lo switch for 500 or 250 footcandles. With #1133 bulb.
26 A 1810. Shpg. wt., 2½ lbs. 19.95

J Powerful "President" Lamp. Equivalent to 200-watt incandescent lamp. Chromed 12″ telescoping arm, double shade with rich rosewood inlay, textured base. Hi-Lo-Off switch. With #133 bulb. 117 VAC.
26 A 3230. Shpg. wt., 3 lbs. 9.95

K Handsome "Continental" Lamp. Equivalent to 100-watt incandescent lamp. Chromed folding arm, double shade, mar-proof grain finish, rosewood inlay in base. Hi-Lo-Off switch. #93 bulb. 117 VAC.
26 A 3231. Shpg. wt., 2½ lbs. 8.95

L Low-Price "Swinger" Lamp. Smartly-styled lamp features flexible neck, double "sure-kool" shade, attractive walnut inlay in base. 15 candlepower. With type #93 bulb, 6-ft. cord. For 117 VAC.
26 A 3233. Shpg. wt., 2 lbs. 3.95
26 A 3147. Replacement #93 Bulbs. Shpg. wt., 2 oz. . . . . **Pkg. of 2/49¢**
26 A 3149. Replacement #1133 Bulbs. Shpg. wt., 2 oz. . . . . **Pkg. of 2/62¢**

"Swing-O-Lite" Lamps

M Low-Cost Gooseneck Lamp. Flexib neck extends over 30″ circle. Shad rotates to direct light. Neutral gray finis With "C" mounting clamp for easy i stallation. With incandescent bulb. F 110-120 V, 60 Hz AC. 5 lbs.
26 A 3174 X. 8.1

N Model BBM-9 Fluorescent Magnifier Lam Has 5″ lens with 13″ focus. Sprin controlled, counterbalanced arm reach 45″. Gray. "C" clamp bracket. T9 tu included. For 110-120 V, 60 Hz AC. Shp wt., 10 lbs.
26 A 3175 U 29.9

P Model BB45C All-Purpose Lamp. Sprin controlled arm extends 45″—adju with a touch. Vented shade. Gray. "C clamp. With incandescent bulb. For 11 120 V, 60 Hz AC.
26 A 3173 X. Shpg. wt., 5 lbs. 13.9

escent Strip Light Fixtures. Heavy-gauge metal fix-s with tubes. Rapid start with "P" rated bal-cept *pre-heat (starter) type. White baked enamel. ow mounting. 2¾" wide x 1¾" deep.

k No.	Type	Watts	Length	Lbs.	EACH
746 X	ST-120*	20	24"	3½	4.09
747 X	ST-140	40	48"	8	7.49
748 X	ST-240	2-40	48"	14	12.49

Vatt Pin-Up Strip Lamp. Installs easily anywhere. ⁄2x20¾" long. With fluorescent tube, 6-ft. cord, C outlet, switch. 117 VAC. U.L. Listed.
23 X. Shpg. wt., 3 lbs. 5.95

Vatt Under-Cabinet Fixture. Sticks up with Scotch-nt®—no screws, no drilling. 1⅛x5¼x18½". With ord, plug, switch. 117 VAC. U.L. Listed.
37. Shpg. wt., 4 lbs. 5.95

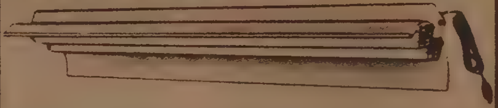
line-Style Ceiling Fixture. Chromed. Extends 3" to elow ceilings. Use with wall switch. With 12" 32-W, W rapid-start tubes. 117 VAC. U.L. Listed.
35 X. Shpg. wt., 10 lbs. 14.95

for Thin Fluorescent Light Fixtures. Attractive when g individually, or pendant, surface or continuous row ed. Walnut wood-grain metal ends; one-piece wrap- diamond prismatic polystyrene lens. Rapid start P" rated premium ballasts. All lamps included. leep. Two-lamp fixtures, 11¼" wide; four-lamp , 15¹³⁄₁₆" wide. 117 VAC. U.L. Listed.

k No.	Type	Watts	Length	Lbs.	EACH
2665 X	WTB-420	4-20	24"	16	27.95
2666 U	WTB-240	2-40	48"	18	20.45
2667 U	WTB-440	4-40	48"	25	34.45

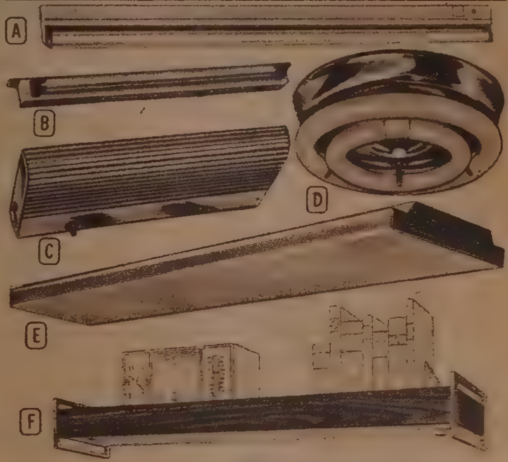
orator-Styled Fluorescent Shelf-Lite. Attractively de-ed to light brightly, look handsome anywhere—in schools or offices. Walnut-grain finish metal front. le slots make mounting easy. With mounting screws, ord, plug, switch and convenience outlet. With one t rapid start lamp. 8½x5¾x38¼" long. For 110-7 VAC.
37 X. Shpg. wt., 10 lbs. 23.95

Fluorescent Light Fixtures

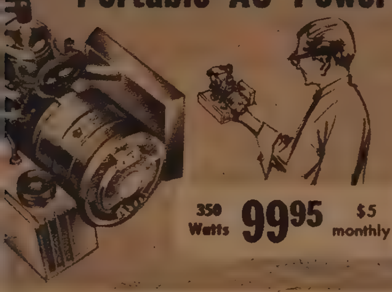


Reflector Fluorescent Light Fixture. Rapid-start, with 6-ft. SJ cord and pull-chain switch. Plugs into existing outlet. With two 40-watt 48" fluorescent tubes. "P" rated ballast with thermal protection. White enamel. 13x4¾x48". 117 VAC. U.L. Listed.
26 A 1922 U. Shpg. wt., 15 lbs. 15.95

26 A 2546 U. Two-Tube Rapid-Start Fixture. As above, but without SJ power cord or switch. 15 lbs. 13.95

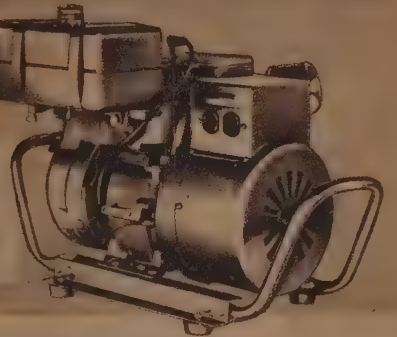


Portable AC Power Plants



350 Watts 99^{95} $5 monthly*

1250 Watts 159^{95} $8 monthly*



atherweight Generator

er. Miniature gasoline-powered tor delivers 350 watts at 117 r 12 amps at 12 VDC. Weighs 4 pounds . . so small you can t in your hand. Charges bat- operates electrical equipment ts, cars, camps or anywhere.

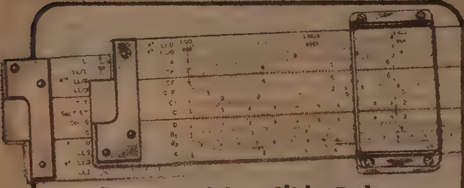
engine runs at 6300 rpm for ours with 30-minute cooling Uses only 14 oz. of fuel per High-capacity magneto igni-irect drive generator; spark ar- muffler. All-metal construction. ½x8½".
51 X. Shpg. wt., 15 lbs. . .99.95

Emergency power Portable AC Alternators

3600-rpm alternators offer ±5% voltage regulation, 25% reserve surge capacity. Solid-state excitation. Automatic recoil starter. Shock-mount design with muffler. 115 V units have two polarized receptacles; dual-voltage also have twist locks. Fuel cap., 1 gal. except 5000-watt, 1½ gal. Made to NEMA standards. Sent truck or express from Oshkosh, Wisconsin. No C.O.D. orders.

Stock No.	Volts	Watts	Rated Amps		Outlets-AC		Horse-power	Size HxWxD	Wt., Lbs.	EACH
			115 V	230 V	115 V	230 V				
26 A 3290 ZF	115	1250	10.9	......	2	......	3	18x24x19"	85	159.95
26 A 3291 ZF	115	1500	13.0	......	2	......	4	18x24x19"	87	199.95
26 A 3292 ZF	115	1750	15.2	......	2	......	4	18x24x19"	87	219.95
26 A 3293 ZF	115/230	2500	21.7	10.9	2	1	6	18x24x19"	99	289.95
26 A 3294 ZF	115/230	3000	26.1	13.0	3	1	7¼	18x28½x18"	148	329.95
26 A 3295 ZF	115/230	3500	30.4	15.2	3	1	7¼	18x28½x18"	148	379.95
26 A 3296 ZF	115/230	4000	35.0	17.5	3	1	8¼	18x28½x18¼"	158	399.95
26 A 3297 ZF	115/230	5000	43.5	21.8	3	1	10½	24½x31x20⅜"	200	499.95

Drawing Sets, Slide Rules and Templates



Post precision Slide Rules

. . easy to use and extremely accurate

1444K 5" Pocket Rule. Same quality construction, accuracy, and smooth glide action inherent in all Post rules. Dimensionally stable bamboo is used to make up the body of the rule; the scales are engine divided on a white face. Designed for simple multiplidation and division. Will not warp, slides easily under any weather conditions. With instructions and carrying case.
26 A 1644. Shpg. wt., 6 oz..............5.95

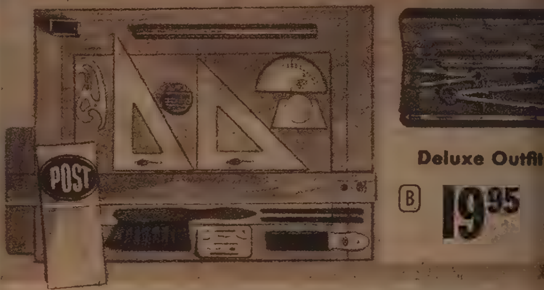
1445 8" Student Rule. Provides 3-digit accuracy of conventional 10" rules on an 8" base. Dimensionally stable bamboo body, requires no lubrication. For multiplication and division. With instructions and tab-punched vinyl carrying case.
26 A 1651. Shpg. wt., 6 oz..............2.45

1447 Full-Size 10" Rule. For rapid, accurate answers to simple mathematical problems. Front side has A, B, C1, D, K scales; reverse side has S, L, T scales. Instructions and high-impact molded case.
26 A 1655. Shpg. wt., 7 oz..............3.95

1450F 10" Technicians Rule. For those who require an advanced trig rule, yet do not need a log log rule. Excellent for a series of related computations. Permits accurate determination of squares and square roots. Reverse side has L, A, TT, Sec T St, Cos S, C, D, and D1 scales. Comes complete with case and instructions.
26 A 1665. Shpg. wt., 1½ lbs..........14.95

1460M Versalog 23-Scale Log Log Rule. For engineers, mathematicians, anyone using advanced mathematics. Log log scales cover range from 1.001 to 22.000; reciprocal log log scales cover 0.00005 to 0.999. Reverse side scales carry LL/1, LL/2, LL/3, TT, Sec T St, Cos S, C, D. With case and 120 page instruction book.
26 A 1699. Shpg. wt., 2½ lbs..........22.95

Professional Outfit
32.50 A



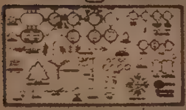
Deluxe Outfit
B **19.95**

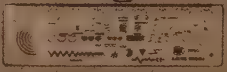
Drawing Set/Instrument Set Outfits

A *Professional Drawing Set:* 20x24" board; 24" transparent ed T-square; 10" 30-60°, and 8" 45° triangle; 6" protractor; co bination scale; French curve; vinyl eraser; erasing shield; ta lead holder; 2 sticks 2H and 4H leads; electronic template; N' Pencil letter, number template; brush; 12 sheets vellum; ca *Instrument Set:* Large and small combination compass; frict divider; beam bar; lead holder. Case. Imported.
26 A 3691 X. Complete Outfit. Shpg. wt., 13 lbs.............32
26 A 3741 X. Drawing Set Alone. Shpg. wt., 12 lbs.............20
26 A 3713. Instrument Set Alone. Shpg. wt., 1 lb.............13

B *Drawing Set:* 18x24" board; 24" T-square; architect's sca 10" 30°, 8" 45° triangles; curve; 5" protractor; 2H, 4H penc lead pointer; tape; art gum eraser; 6 sheets of 12x18" pap erasing shield; lettering guide; dusting brush; case. *Instrum Set:* 6", 4½" bow compasses, pencil and divider parts, cen wheel adjustment; 5¼" dividers, straightening device; leads; ca Nickel plated. Imported.
26 A 2559 X. Complete Outfit. Shpg. wt., 11 lbs.............19
26 A 2011 X. Drawing Set Alone. Shpg. wt., 10 lbs.............12
26 A 2073. Instrument Set Alone. Shpg. wt., 1 lb.............

Post electronic symbols Templates

C


D


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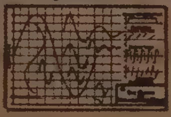
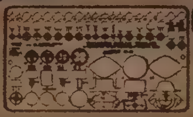
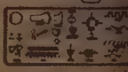



F

G


C **2972R Electronics Symbols Template.** Plastic template has symbols for tubes, rectifier, crystal, resistors, capacitors, lamps (pilot, illuminated), meter, filament, connectors, plug, receptacle, transformers (standard, delta, Y), relay, coils, revisions, ground, battery, switch, pushbutton, wafer switch, antenna, fuse. Size, 5⅛x9¼". Shpg. wt., 6 oz.
26 A 2159............................3.60

D **2972½D.** Skts., meters, tubes, transistors, antennas, capacitors, chassis/ground, fuse, mike, spkr., batt. rectifiers, thermal overload, solenoids, heaters, rheostats, coils, transformers, plug. Size 5x7".
26 A 2171. Wt., 5 oz..................2.95

E **2974R Wave Forms.** Sine/variable, steady and fluctuating DC, modulated carrier, 5½x8¼". Wt., 1 oz.
26 A 2179............................2.65

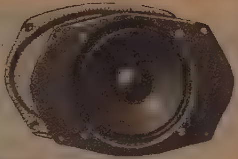
F **2973D Transistor Outlines.** Based JEDEC standards. 27 cutouts, and side views. 5½x9½". Wt., 1
26 A 2195..........................2

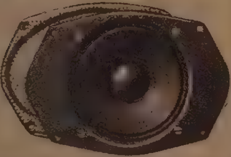
G **2972½R Electronic Symbols.** thode, speaker, pushbutton, hea ground, antenna, mike, switc capacitors, ohm, resistance, fuse, ba coils, outlets, aux. systems, pos./n
26 A 2172. Size, 3x8⅜". Wt., 1 oz.

llied Reverb Systems for stereo-like sound

only $1 more

Deluxe 6" rear deck speaker kit





1 more

6"
eck
r kit

sh-mount Tunable Reverb

95 less speaker *Quality reverb with tunable control*

the exciting musical sound that ration brings to your car. Set s under dash, connects to your dio. Double-spring reverb with control gives you complete nd of stereo-like sound. Hand-styled in chrome and non-reflec-bble grain. With safety knobs, ight. 1½x7x5½". For 12 VDC, e ground.

44. Wt., 5 lbs. 19.95

43. As above, *plus* 6" round (for convertibles and hard- 6x9" adapter board (for rear Includes chrome speaker grille. wt., 6 lbs. 20.95

Trunk-mount Tunable Reverb

22^{95} less speaker *Reverberation "turns-on" AM or AM-FM radio*

Variable control on dash panel lets you adjust reverberation for thrilling "live" sound. Double-spring system delivers beautiful music with stereo-like fidelity. Control unit, with pilot light, has two recessed safety knobs on die-cast panel. Solid state, works in coldest weather. For 12 VDC, negative ground. Control panel, 1¾x4¾". Reverb mounts in trunk.

19 A 4542. Wt., 5½ lbs. 22.95

19 A 4541. As above, *plus* 6" round speaker (for hardtops and convertibles), 6x9" adapter board (for rear deck). Includes 6x9" chrome speaker grille. Shpg. wt., 6 lbs. 23.95

ALLIED
REVERB
BALANCE

Control Panel mounts under dashboard

Reverb unit mounts inside your car's trunk. . . Tuning panel gives you fingertip control from the front seat

rbalite adds reverb plus a psychedelic light show to car radio or tape player

ger Model R-39R. Unique solid-state Verbalite adds able reverberation to your car radio, or an excit- 3rd channel effect to your stereo tape player, a fascinating under-the-dash psychedelic light w. Multi-colored light display is activated by the and frequency of the music from your radio or player for synchronized color and sound. Reverb light intensity controls. Slim, modern styling easy mounting. 1½x9x6". With 6x9" speaker, me grille. 12 VDC, negative ground. Japan. *ty First: Lights should not be used while car is ng or when they may distract the driver.*

4596. Shpg. wt., 5 lbs. 34.95

34^{95} *Offers reverberation, plus multi-color light display that varies with music*

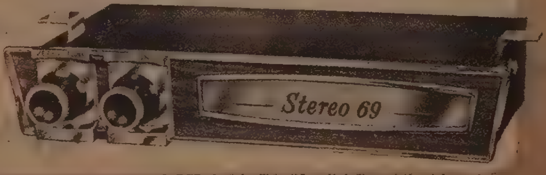
VERB-A-TONE
VOL O LIGHT

njoy the stereo-like sound that your car radio gives you with Reverberation

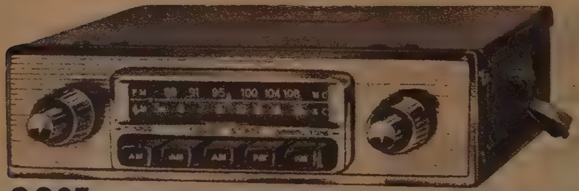
ger Model RR-22-R. Cruising along the freeway, way or byway, the most beautiful musical sound re likely to hear will come from a reverberation em connected to your car's AM or AM-FM o. Variable control permits listener to tune rberation to suit his taste. Boasts rugged solid- e construction for dependability, on/off indica- lamp. Face plate has handsome walnut finish med in sparkling chrome. Easy to install be- e plug-in assembly eliminates wiring confusion. udes 6x9" rear speaker with chrome grille. Size, 9x4½". 12 VDC; neg. ground. Japan.

4538. Shpg. wt., 5 lbs. 22.95

22^{95} *Tunable reverb system for your car's AM or AM-FM radio*



FM-AM Radios and FM Tuners for your ca



69⁹⁵
$5 monthly*

- Enjoy static-free FM radio while you drive
- Delivers car-filling sound without distortion

Deluxe pushbutton FM-AM Car Ra

Automatic Radio. Provides full-fidelity recep
of static-free FM, plus excellent AM. Sens
11-transistor circuit pulls in strong, clear sig
Push-pull output delivers plenty of car-fi
volume without distortion. Has volume and
controls; Automatic Frequency Control (A
to prevent FM drift. Big 5x7" speaker. Mo
easily under dash in all cars or boats;
mounts *in* dash in some autos. 5⅛" knob cen
3⁹⁄₁₆x1½" dial window. Size, 2x7x7". Fo
VDC, positive or negative gnd. From Ja
19 A 4254 X. Shpg. wt., 10 lbs. 6

44⁹⁵
$5 monthly*

- Adds FM reception to your present AM car radio
- Smart slimline styling for under dash mounting

Solid-state hi-fi FM Car Radio Tu

Automatic Radio. Adds the enjoyment of st
free FM music to your present AM car
Slim-styled tuner mounts under dash; has
thumbwheel controls. "SS" switch elimi
overload and distortion in strong signal a
AFC locks in FM stations, prevents drift. S
state circuit boasts 9 transistors, 4 di
thermistor. Installs easily by plugging into
AM car radio antenna input, uses its ante
2½x7x6½". For 12 VDC, negative gro
With cables, instructions. From Japan.
19 A 4193 X. Shpg. wt., 4 lbs. 4

Slimline solid-state Car Radios by Ranger

FM Tuner
39⁹⁵
$5 monthly*

FM-AM Rad
59⁹⁵
$5 monthly

Ranger slim-line FM Car Radio Tuner

Adds the wonderful world of FM programing to your present AM car radio. Solid-state circuit—no drift, excellent wide-range response. Has 6 transistors and 8 diodes. Automatic Frequency Control locks in FM stations to prevent tuning drift. Unique mounting design permits built-in look, and interchangeable walnut and black vinyl inserts add to custom appearance. Glistening chromed knobs and trim. Size, 1⅞x9x4½". For 12 VDC, neg. gnd. Japan.
19 A 4038. Shpg. wt., 4 lbs. 39.95

Slim-line FM-AM under-dash Radio

Slim, trim under-dash radio for complete car entertainm
Tunes high-fidelity FM broadcasts, plus your favorite
programs. Solid-state circuit—reliable, compact. S
rule dial, tone and volume controls. FM-AM sel
switch. Sensitive, powerful circuit includes 11 transisto
diodes, thermistor. Interchangeable walnut and
vinyl inserts add to custom-installed look. Has 5x7" sp
er. 1⅞x9x4½". For 12 VDC, neg. or pos. gnd. Japa
19 A 4256. Shpg. wt., 6 lbs. . . . .

Custom-mount FM-AM Radio for Volkswagens . . by Automatic Ra

For 6 or 12 Volt VW's

- Mounts in dash of 1958-1969 VW sedans
- Pushbutton controls for FM and AM tuning

69⁹⁵
$5 monthly*

Add the enjoyment of both FM and AM
reception to your Volkswagen, at a price
below that of dealer-installed VW
Custom-designed, deluxe pushbutton
mounts perfectly in the dash of 1958 thr
1969 Volkswagen sedans. Features five eas
set pushbuttons, three for AM and two for
Instant-play 11 transistor circuit boasts
tuned stages, plus RF stage for long-rang
ception. AFC prevents FM drift. Tone co
and 6" speaker provide excellent sound qu
With everything needed for installation. F
or 12 VDC. Japan.
19 A 4456 X. Shpg. wt., 9 lbs. 6

*See page 438 for full Credit De

ustom and universal-mount AM Car Radios

95

nthly*

ur lowest priced pushbutton AM Radio

to-install radio adds entertainment to your driving he ease of pushbutton tuning. Solid-state AM radio es five easy-to-set pushbuttons for fingertip control. -transistor high-gain circuit offers good sensitivity lectivity. Mounts under dash in any 12-volt vehicle. ount in-dash in some cars. 5x7-inch external speaker s big sound. 5⅛" knob centers. Large, easy-to-read ½" slide-rule dial for on-station tuning. Size, 2x5x For 12 VDC negative or positive ground. From . Shpg. wt., 9 lbs.
35 X. 29.95

19^{95}

$5 monthly*

Our lowest priced manual-tuning Radio

Get the latest news and music while you drive with this value-packed six-transistor AM car radio. High-gain 6-transistor circuit offers good sensitivity and selectivity. Plays the instant you turn it on—no waiting for tubes to warm up. Mounts easily under dash in any 12-volt vehicle. Will mount in dash in some cars. Built-in 4-inch speaker has clear tone. 5⅛" knob centers. Large easy-to-read 1½x 3½" slide-rule dial for pinpoint manual tuning. Size, 2x5x 6⅜" deep. For 12 VDC negative or positive ground. From Japan. Shpg. wt., 9 lbs.
19 A 4234 X. 19.95

shbutton AM Radios for custom mounting in Volkswagens

utton
95
ual
95

Pushbutton Radio
39^{95}

ustom AM Radio for 1958-1969 models

tyled solid-state radio specially designed for custom ation in Volkswagen cars from 1958-1969. Fits per- in dash. Priced well below dealer-installed Volks- radios. Five easy-to-set pushbuttons. Tone control, speaker. 6 or 12 VDC, neg. gnd. Japan.
130 X. Shpg. wt., 7½ lbs. .39.95

dio with Manual Tuning for 1958-1969 Model VW's. llus.) 7 transistors, 2 diodes. 5" speaker.
147 X. Shpg. wt., 7½ lbs. .29.95

Custom AM Radio for '68, '69 model VW's

Quality radio installs in all 1968, 1969 1300 Series VW's. Priced well below dealer-installed Volkswagen radios, yet performs like a high-priced set. 7-transistors for high sensitivity, selectivity. Plays the instant you turn it on—no waiting for tubes to warm up. 5 easy-to-set pushbuttons makes it easy to tune your favorite station. Manual control tunes in seldom-used stations. Continuously variable tone control for rich lows, clear highs. Wide-range 6" speaker. For 12 VDC. Japan.
19 A 4595 X. Shpg. wt., 7½ lbs. 39.95

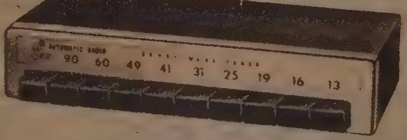
eluxe slim-line AM Radio fits any car

9^{95}

monthly*

- RF stage
- 6 transistors and 8 diodes
- Large full-tone 5x7" built-in speaker
- Luxurious styling enhances any car

ll-feature AM car radio rivals factory-installed dels costing much more. Circuit with RF stage sts 6 transistors and 8 diodes for high sensitivity selectivity. 2-watt audio output. Tone control. ilt-in 5x7" speaker. Mounts under dash with versal mounting bracket. Interchangeable walnut black vinyl inserts. Chrome-trimmed case, 1⅞x ½". For 6 and 12 VDC, neg. or pos. gnd. Japan. A 4255. Shpg. wt. 5 lbs. 29.95



Pushbutton 9-band Shortwave Car Tuner

29^{95}

$5 monthly*

- Tunes 3.1 to 22 MHz in 9 bands
- Plays through AM car radio
- Plug-in hookup—no rewiring

Receive shortwave in your car. Solid-state tuner pulls in European radio, Voice of America, more. Pushbuttons select 90, 60, 49, 41, 31, 25, 19, 16 and 13 meters. Tune your AM radio to "10", select desired band, then tune with your regular radio. Plugs into antenna socket of AM radio, uses its standard antenna—no rewiring! 1⅝x8⅓x3½". 6 or 12 VDC neg./pos. ground.
19 A 4041. Shpg. wt., 3½ lbs. 29.95

Auto Speakers, Antennas and Accessories

8^{95} 12^{95}

Utah tone-improving Rear Deck Speaker Outfits

6x9" Speaker Outfit

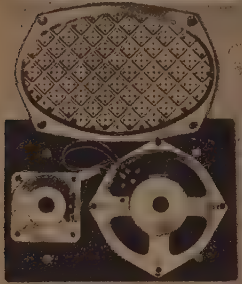
Add a new dimension of realism to your present car radio at a modest cost. Rear deck speaker system adapts to any automobile radio—tube type or transistor. Features powerful 5.5-oz. magnet. Illustrated instructions show how to wire for 10, 20, or 40 ohms operation. Full 12-watt music power capacity. Deluxe chromed grill, 5½x9". Depth, 3". Screw terminals. Includes: grill, escutcheon, fader, hardware, wire, instructions. Wt., 1¾ lbs.

19 A 4572. . . . . .8.95

6x9" hi-fi Outfit

Finest 2-way rear deck automotive speaker system. Features big 6x9" woofer complete with 6-oz. magnet for rich, powerful bass. Built-in 3" tweeter for better reproduction of high notes. Can be wired for 10, 20, or 40 ohms operation. Capacity, 15 watts peak. Deluxe chrome grille, 5½x9". Depth, 3". Screw terminals for easy, no-solder hookup. Includes: grille, escutcheon, fader control, hardware, wire, full instructions. Wt., 2½ lbs.

19 A 4571. . . . . .12.95



Utah Universal Auto Replacement Speakers

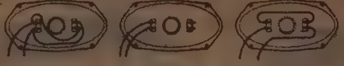
2-speaker Rear Deck Outfit

5^{95}

- Big 5" Woofer, 3½" Tweeter
- Independent Volume Control

Surround yourself with the sound of music. Budget-priced speaker system features separate 5" woofer and 3½" tweeter for smooth response, greater realism. Woofer, tweeter, and crossover network are completely wired and installed on a baffle plate. For 8-10, 20, or 40 ohms. Capacity, 6½ watts peak. Fits 6x9" cutout. Volume control, hardware, chrome grille.

19 A 4573. Shpg. wt., 3 lbs. 5.95



8-10 ohms 20 ohms 40 ohms

Standard Universal replacement speakers with 2 separate voice coils that can be connected for 8-10, 20, 40 ohm speakers. Av. wt., 9 oz.

Stock No.	Type	Size	Imp.	EACH	Stock No.	Type	Size	Imp.	EACH
19 A 4582	SP57DMI	5x7"	10/20/40	4.17	19 A 4588	SP610E8	6x10"	8-10	4.50
19 A 4583	SP69DMI	6x9"	10/20/40	4.56	19 A 4589	C57ECW	5x7"	8	3.96
19 A 4584	SP410EMI	4x10"	10/20/40	5.16	19 A 4590	C69JCW	6x9"	8	5.85
19 A 4585	SP6DMI	6"	10/20/40	4.17	19 A 4591	C69FCMIW	6x9"	10/20/40	5.94
19 A 4586	C5FC	5"	8	4.74	19 A 4592	C69GC3MI	6x9"	10/20/40	9.96
19 A 4587	SP58D8	5x8"	8-10	3.30					

Stereotron . . converts radio to two-channel sound

19^{95} less speakers

Hear "stereo-like" sound

Takes monophonic output from FM or AM radio, or phono, and separates it into two channels for stereo-like sound. *Not a reverb.* Just connect unit to output terminals, connect two speakers (not included) to Stereotron. Size, 3x2x1½". Shpg. wt., 2 lbs.

19 A 4123. . . . . .19.95

Hash-Husher Noise Filter Pkg

Low as 10^{50}

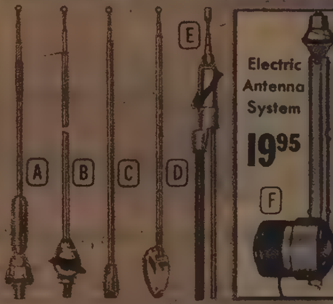
Reduces annoying interfer ence—especially effectiv on FM radio and CB

Add miles to mobile AM, FM, CB Ham reception. Filters out interferen ("hash") carried to your radio recei from the ignition, alternator, etc. Sna in place between spark plugs and lea Has high-tension coil-to-distributor ter lead. Shpg. wt., 8 oz.

19 A 4435. HH-8 for 8 Cylinder. 12

19 A 4436. HH-6 for 6 Cylinder. 10

19 A 4593. HH-4 for 4 Cylinder. 10



Electric Antenna System

19^{95}

Merlin Auto Radio Antennas for AM or FM reception

A SP-3800. Has built-in booster coil fo range reception—equivalent to 125" Swivel ball base permits mounting a angle. With unbreakable stainless steel mount. 3 sections, 48" lead cable.

19 A 4437 X. Shpg. wt., 2 lbs. . . . .

B SP-901. Standard 3-sec. top mount ball and steel stamped rocker bas tends from 25" to 57". Has 48" fixed cable. Shpg. wt., 2 lbs.

19 A 4438 X . . . .

C SP-4000-T. Unique transistorized an pulls in metropolitan or fringe sta 3 sections extend to a full 57". Has 48 cable. Shpg. wt., 2 lbs.

19 A 4190 X. . . . .

D SP-2601. Single stanchion side-moun any model Volkswagen through 196 er foreign cars. 23" mast extends to 57". chrome base, 36" copper lead cable.

19 A 4440 X. Shpg. wt., 2 lbs. . . . .

E 19 A 4441 X. For '67-'70 Volkswagens

F TM-5. Electric power antenna for mounting on most domestic cars. E to 35", collapses to 1¼". With 54" sh cable, 72" elec. harness. Operates fr VDC; 15-lb. thrust. Includes hardwar

19 A 4442 X. Shpg. wt., 6 lbs. . . . .

19 A 4443 X. Adapt. for Rear Mount. 1 lb

See page 438 for details on Allied's Credit Fund

Install-it-yourself Auto Accessories

Radar Sentry warns of radar traffic zones

DRIVER ALERT

29.95 $5 monthly *see page 438*

s audible warning when triggered by police radar.
ts you when driving into dangerous area; makes you
re of speed limits for safety. Solid-state circuit powered
wo 1000 hour mercury batteries (included). Volume
rol. Only 2¼x3⅝x3¼"; clips to sun visor. Black color.
may be regulated by state laws.
.4132. Shpg. wt., 1¼ lbs....................29.95

igh-intensity Auto Lite

59
- For map reading
- Flexible arm

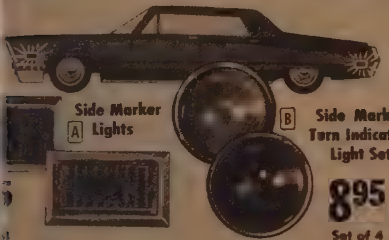
Dash-12V. Plugs into your car
e lighter. Instantly provides
h a high-intensity non-glare all-
light. Chrome-Flex™ swivel
ects light to where you need it.
id for map reading, shaving, ap-
nakeup, etc. Special convenience
piggyback electrical socket that
use of another 12-VDC
ce at the same time. Has on/off
. Size, 7½x3⅛x1¼".
17. Shpg. wt., 4 oz.........2.59

Lectrojack™ electric Auto Jack

39.95 $5 monthly *see page 438*

Pushbutton electric auto jack plugs into your car's cigarette lighter. Raises any passenger automobile in a jiffy and keeps it up while you change a flat or a wheel or install tire chains. Holds by itself indefinitely. Consumes no more power than an electric window. Has 10-space adjustable bumper hook. With universal cigarette lighter plug, 16-ft. cord, reversing in-line switch, operating instructions. For 12 VDC systems.
19 A 4018 X. Shpg. wt., 23 lbs......39.95

ide Marker Lights for style and safety

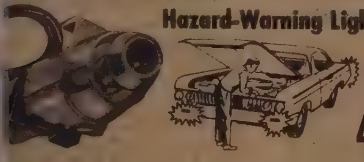


8.95 Set of 4

Marker Lights. Bring your car up-to-date with
marker lights, required by law on all new cars.
dded safety to your car and passengers by warn-
ns approaching from the side. Easy to install;
oof construction; uses S.A.E. lenses and bulbs.
udes 2 red and 2 amber lights. For 12 VDC.
21. Shpg. wt., 1½ lbs..........Set of 4 for 4.95

Cornering Set. Deluxe warning lights give your
an up-to-the-minute look. Light-up with head-
nd blink in unison with turn indicators, warning
ars approaching from the side. Waterproof con-
n. Easy-to-install; solderless connectors. Includes
d 2 amber lights. For 12 VDC.
34. Shpg. wt., 1½ lbs..........Set of 4 for 8.95

Hazard-Warning Light



4.29

"must" for every car. Prevents possible collision
ou're stranded on the highway at night. Flashes
turn signals at once—warns approaching traffic.
hook-up. Illuminated pull-switch. For 12 VDC.
avy-duty flasher, in-line fuse.
9. Shpg. wt., 2 lbs........................4.29

Bon-Aire Auto Vacuum Cleaner

Plugs into car's lighter socket

8.88

Vacuum cleans cars, campers, boats, planes. Lightweight design. Powerful suction provided by 12,000-rpm motor and specially pitched impeller. Handy nozzle gives easy access to hard-to-get at places. Includes upholstery brush. Draws only 4.5 amps. 4x17". For 12 VDC.
19 A 4257 X. Shpg. wt., 3 lbs........................8.88
19 A 4156 X. Above, 15,000 rpm motor, crevice tool. 5½x21". Shpg. wt., 5 lbs..............................14.98

Dial-O-Matic Headlight Turn-off-Delay Control

DIAL-O-MATIC

8.95 *Safely escorts you to the door, no fumbling, stumbling*

Fedtro HDC-12V. Lets you dial the length of time headlights stay "on" after you leave your car: 30, 60, or 120 seconds. Your headlights stay "on" while you walk in safety to your door. The lights then turn "off" automatically after you are in your home. 4¾x1¾x2". 12 VDC.
19 A 4006. Shpg. wt., 1 lb..............................8.95

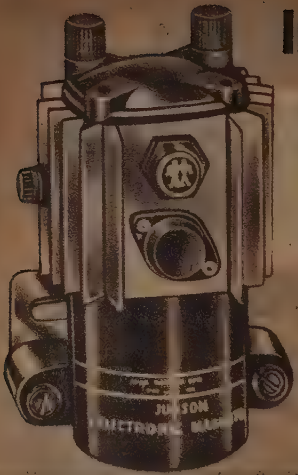
53-amp Alternator System

64.95 $5 monthly *see page 438*
- Keep your battery at high-charge level
- Even charges at idle

Replaces low-amp alternator or generator. Gives peak of 53 amps, 15 amps at idle. Splashproof windings. With regulator, ⅜" single pulley (not for air-cond. cars with 2 drive belts), bracket, cables. 12 VDC negative ground.
19 A 4039 X. Wt., 17 lbs..........64.95

PAGE 423 FOR OTHER AUTOMOTIVE ACCESSORIES

Install-it-yourself Auto Accessori



Electronic-magneto Ignition System

39⁸⁸

$5 monthly*

Capacitive-discharge Ignition System

39⁹⁵

$5 monthly*

DELTA
MARK TEN
CAPACITIVE DISCHARGE IGNITION

Judson electronic-magneto Ignition System

Performance-proved silicon transistor system gives improved ignition for faster starts, outstanding high-rpm performance, longer plug and point life. Like the mechanical magneto, voltage increases as engine speed increases, matching ignition requirements of engine. Even the output waveform is same as a magneto, reducing plug wear and giving hotter spark. One-piece unit installs easily, simply transfer 2 wires from present coil. Uses less current than standard ignition. For 6 or 12 V neg. gnd.

19 A 4112. Shpg. wt., 3½ lbs. 39.88
19 A 4385. As above, but for positive ground. 39.88

Delta capacitive-discharge Ignition Syste

"Mark 10." True *electronic* ignition system for car or
Develops 3 to 4 times more energy, with spark rise-ti
times faster, for complete combustion. Reduces
boosts performance, gives easier starts in any we
Provides up to 20% better gas mileage; 3 to 10 times
spark plug life; 60 to 80% *less* ignition maintenance.
Controlled Rectifier switching—unaffected by tempe
extremes. After easy assembly, it installs in just 10 mi
using standard coil—no rewiring! Size, 8x5x4". F
volts DC negative ground. Shpg. wt., 3 lbs.
19 A 4552. ....

Full-sweep 270° Auto Tachometer

29⁹⁵

$5 monthly*

- Our best selling Auto Tach
- 0-9000 rpm
- Panel mount
- Illuminated full-sweep dial

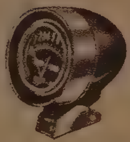
Custom-styled 3½" tachometer gives accurate indications of engine rpm. Full-sweep 270° dial has three times the needle travel of ordinary tachs. Adjustable pointer can be set to shift points. Reads 0-9000 rpm. Universal panel mount, handsome chromed case. Zener diode controlled. For 6 or 8-cylinder engines; 6 or 12 volt systems, positive or negative ground. Shpg. wt., 3 lbs.
19 A 4431. ....29.95

A **19⁹⁵** $5 monthly*

B **12⁹⁵**

A **Wide-Sweep "GT" Tachometer.** Gives continuous 0-8000 rpm reading for maximum performance and gas mileage. Zener regulated for accuracy. Solid-state circuit. Lighted 3½" dial. You set adjustable pointer to show when to shift. Black/chrome finish. Universal mount. For 8-cylinder cars only. 6-12 V, positive or negative ground.
19 A 4427. Shpg. wt., 1¾ lbs. 19.95

B **Custom 2" Bullet Tachometer.** Rugged tach with 2" illuminated dial, reads 0-8000 rpm. Zener diode regulated for accuracy. Universal mount for steering column, console, under dash, top of dash. Adjustable shift indicator. Black/chrome. For 6 or 12 volts, positive or negative ground. 1¼ lbs.
19 A 4087. For 8-Cylinder Cars. 12.95
19 A 4088. For 6-Cylinder Cars. 12.95

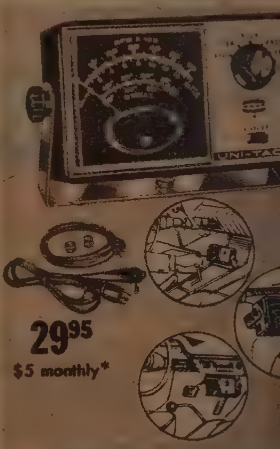


Reads 0-6000 rpm

12⁹⁵

Volkswagen Tach

Get top performance from Volkswagen, most other 4-cylinder cars. Bullet tachometer reads 0-6000 rpm. Lets you know when to up-shift for best acceleration, when to downshift to avoid lugging—insures best gas mileage. Just set pointer to proper shift points. Illuminated 2" dial. Mounts anywhere. Black/chrome. For 6 or 12 V ignition. Wt., 1¼ lbs.
19 A 4430. ....12.95



29⁹⁵

$5 monthly*

Uni-Tach Motor Monit

Versatile instrument can be
or console-mounted, or use
tune-up tester. Measures: e
rpm (2 ranges): 0-1600, 0-
rpm; dwell angle, 0-45°-60°;
tery output, 0-16 volts. Deter
point condition, monitors ti
For 4, 6 and 8-cylinder eng
6 or 12 VDC pos. or neg. gr
Easy to install—only three
nections. With cable, mtg.
ware, plug-in test leads, ins
tions and tune-up guide. 6¼x
2". Shpg. wt., 4 lbs.
19 A 4015. ....

Easy-to-install Accessories for your car

C continental-styled Auto Gauges

ental design gauges monitor your engine con- ly, eliminate guesswork. Minimize possibility ne damage. Illuminated gauges have black d chrome bezels, are set in luxurious chrome anels with simulated teak inlay. With fit- nd mounting hardware. For 12 volts.

Trio Combination Panel. Includes 0-80 lb. pressure gauge, 60-0-60 ammeter, 100-250° al water temperature gauge. Wt., 2 lbs.
64 ....17.95

Dual Combination Panel. Includes 0-80 lb. ressure gauge, 60-0-60 ammeter. 1½ lbs.
565.......................................6.95

Water Temperature Gauge. Reads 100-250°.
4567. Shpg. wt., 8 oz...................9.95

Oil Pressure Gauge. Reads 0-80 lbs.
4568. Shpg. wt., 8 oz...................4.95

Ammeter. Reads 60-0-60 amps.
4566. Shpg. wt., 8 oz...................4.95

97. 8' 10-ga. Wire for Ammeters. 8 oz.......1.14

17^{95}

A 989 Trio Combination Panel

B

C

D

E

amm Musical Horn Sets

$5 monthly*

iver Kwai
Cavalry Charge

501. River Kwai (Col. Bogey's March) Horn. Five-trumpet horn set plays t four bars of famous Col. Bogey's from the award winning film e on the River Kwai". Cycle switch s horns to sound simultaneously. led die-cast trumpets (longest is battery-operated single-blast com- . One mile range. Switch for use of horn. For 12 VDC neg. gnd.
461 X. 12 lbs...................69.95

411 Cavalry Charge Musical Horn ot illus.) Similar to "River Kwai" t has 4 trumpets, Plays U.S. cav- arge. Shpg. wt., 10 lbs.
462 X...........................69.95

umpet single- st Horn Set

9^{95}
monthly*

32. Two chrome-plated brass horns a loud, clear and pleasing con- l tone. Powerful, distinctive and on-getting. Range, ½-mile. Comes eavy-duty compressor. 12 VDC ve ground. Shpg. wt., 5 lbs.
50 X...........................19.95

Combination 270° Water-Oil-Amps Gauge Kit

Illuminated gauges in chrome panel

14^{95}

Custom-styled panel with trio of 270° wide-sweep gauges for efficient monitoring of your engine's operation. No need to trust your engine to the usual indicator lights—you can spot trouble before it begins. Includes 0-80 lb. oil pressure gauge, 100-220° water temperature gauge, and 60-0-60 ammeter. Illuminated, in deluxe chrome panel with black and walnut inlays. For 12 volts DC.
19 A 4560. Shpg. wt., 2 lbs. 14.95

Siren Burglar Alarm

27^{95} Spun-aluminum construction

Protects your car with sharp penetrating sound of a police-type siren. Operates when doors, hood or trunk are opened and continues until alarm is turned off with key. With 6 switches, brackets, electric lock, hardware, instructions. 12 V neg. gnd. 6 lbs.
19 A 4127 X.......................27.95

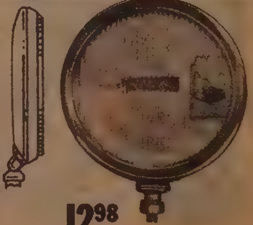
Tripplite Burglar Alarm

24^{95} Heavy-duty Siren

Piercing siren goes off when door is opened, hood or trunk lid is raised. Can be wired to blast when emergency brake is released. Stays on until reset by pick-proof lock. With all switches, brackets, wire, instructions. For 6, 12 or 24 V neg. gnd. Wt., 5 lbs.
19 A 4569.......................24.95

Hella Fog and Driving Lamps

Extremely powerful fog and driving lamps, promote safer night driving. Ultra-thin design. Special heat interchanger, hardened and tempered white glass lens, long-life quartz-iodine element. 5¾" diameter, 2⅛" deep. Adjustable mounting bracket. 12 VDC. Shpg. wt., 2 lbs.
19 A 4136. Fog Lamp...................12.98
19 A 4137. Driving Lamp...............12.98
19 A 4138. Replacement Element.....4.98



12^{98}

Keep your car in top tune and save

BONUS OFFER

Keyless E-Z Start

FREE when you buy all three of these RAC hand-held car engine testers, listed at right.

Described below

Save $4.88

4-piece Outfit only

49^{95} $5 monthly*

24^{95}

12^{50}

12^{50}

Hand-held car engine Testers

[A] **Dual-Range Dwell/Tach/Points Auto T with Big 3½" Meter.** Dual-range tach s 0-1000 and 0-5000 rpm. For adjusting i speed, high-speed engine adjustments, pr ly setting correct cam angle of points. 0 0-60° dwell ranges. Resistance scale tell when points should be replaced. For 4, 8-cylinder, 4-cycle engines, 6 or 12 systems. Zener-regulated. 1 lb.
19 A 4194. . . . .

[B] **3½" Meter Ignition Circuit Tester.** Qu and easily pinpoints troubles in the tion system. Checks points, coil, conde spark plug, wire, resistance. Color-c scale. Oil and gas-resistant leads. For 6 24-volt, pos. or neg. gd. Wt., 1 lb.
19 A 4195. . . . .

[C] **3½" Meter Volt-Amp Tester.** For tes troubleshooting, setting generators, a nators, voltage regulators, overall elect system. Ranges: volts, 0-8, 0-16; amps, For 6-12 volts, positive or negative gro
19 A 4196. Shpg. wt., 1 lb. . . . .

4-Piece Outfit. All three units above, *FREE* Keyless E-Z Start Bonus. 5 lbs.
19 A 0008 L4X. . . . .

RAC solid-state auto Testers

DWELL TACHOMETER
D

17^{95}

IDLE TACHOMETER
E

9^{95}

CAM DWELL TESTER
F

9^{95}

VOLTMETER
G

9^{95}

[D] **Idle Dwell/Tach Auto Tester.** Measures dwell and rpm on 4, 6, 8-cylinder engines without changing connections or instruments. Scales: 0-1000 rpm; 0-45°, 0-60°. Tells when points are spaced right, reveals dwell angle variations. Checks weak cylinders, valves, plugs, air-filter capacity, air-fuel ratio. Burnout-proof. Shpg. wt., 1 lb.
19 A 4197. . . . . .17.95

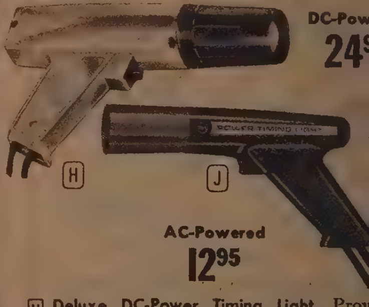
[E] **555 Idle Tach Tester.** 0-1000 rpm. For adjusting idle speed on 4, 6, 8-cylinder engines. For 6-12 volts positive or negative ground.
19 A 4198. Shpg. wt., 1 lb. 9.95

[F] **556 Cam Dwell Tester.** 0-45°, 0-60°. Shows cam dwell angle of breaker points on 4, 6, 8-cylinder engines. 6 or 12-volt systems.
19 A 4199. Shpg. wt., 1 lb. 9.95

[G] **558 Dual-Range Voltmeter Tester.** For checking and troubleshooting 6 and 12 volt ignition systems.
19 A 4205. Shpg. wt., 1 lb. 9.95

DC-Pow

24^{9}



AC-Powered

12^{95}

[H] **Deluxe DC-Power Timing Light.** Prov brilliant, blue-white flash for chec ignition timing even in daylight. Safe, sh proof. Triple-plated chrome finish. Oper from 6 or 12-volt car battery. Fully prote against accidental burnout in case of rev polarity. Xenon strobe. Leads. 3½ lbs.
19 A 4463. 2
19 A 4164. Repl. Tube. 6 oz. . . . .

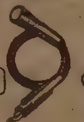
[J] **AC-Powered Timing Light.** Gives sh bright image for accurate timing. Ch automatic spark advance, detects worn tributor shaft, helps sync double po Xenon strobe, U.L. Listed. 110 V, AC/
19 A 4131. Shpg. wt., 2 lbs. 1
19 A 4165. Repl. Tube. 6 oz. . . . .

KEYLESS E-Z START

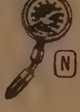
RAC Keyless E-Z Start

4^{88} **Starts, turns off engine from under-the-hood**

Simplifies repair jobs, eliminates need for the second man. Combination remote starter/ignition switch "starts" car without a key. Lets you turn on ignition, start motor, and turn off ignition from under hood. Supplied with extra-long leads. Housed in shockproof case. Shpg. wt., 2 lbs.
19 A 4114. . . . . .4.88



All 4 Units 9^{88}



Save on set of four troubleshooter Tes

Complete Set of 4 Testers Listed Below.
19 A 4113 X. 5½ lbs. *Save 69¢*. . . . .

[K] **Timing Light.** Neon bulb. Wt., 1 lb.
19 A 4012. . . . .

[L] **Remote Starter.** Lets you crank e from under hood. Wt., 1 lb.
19 A 4011. . . . .

[M] **Vacuum and Fuel Pump Tester.** vacuum, 0-7 lbs. pressure. Wt., 1½ l
19 A 4014. . . . .

[N] **Compression Tester.** 0-300 lbs. 1½ lbs.
19 A 4013. . . . .

*See page 438 for full Credit De

Deluxe Automotive Test Instruments

Solid-state all-purpose Auto Analyzer

AUTO ANALYZER
AUTO ANALYZER

**Color-coded, easy-to-read 6″ Meter
Tachometer, Spark Tester, Dwell Meter,
Voltmeter, Ohmmeter, Ammeter and
Condenser Checker—all in one Unit**

69⁹⁵
$5 monthly*

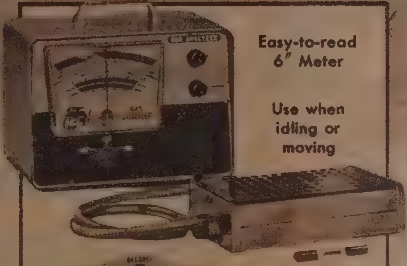
ıst" for the serious repairman. Fast-working, all-in-one
y-powered analyzer makes tune-ups and servicing easier.
6 and 8-cylinder engines. Tachometer reads engine rpm—
ou to set idling speed and automatic transmission shift
Dwell meter tests points, distributor and spark advance.
ter checks generator, alternator, voltage regulator. Ohm-
covers electrical systems. Color-coded scales: Tachometer,
and 0-6000 rpm; Dwell angle, 0-60°; Amps, −5 to +90;
0-3, 0-16; Spark Output, 0-30; Resistance, 0-20,000 ohms;
ıser resistance; coil resistance. For 6 or 12 volts. With
es. Shpg. wt., 8 lbs.
208 X. 69.95
079. **Extra Batteries.** (Use 3.) 10 oz. . . . . **Pkg. of 4 for 65¢**

**Post
for
okup**

ical Tester

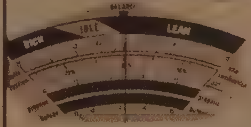
29⁹⁵
**five
nt tests**
$5 monthly*

:e electrical tester
s highly accurate
of alternator, gener-
egulator, battery and
. Has easy-to-read
onval meter, trouble-
rnout-proof circuitry.
0-120 and 0-300
0-16 volts. Has bat-
ost adapter for easy
p and simplified test
ures. Detailed in-
ons.
126. 4 lbs. 29.95



**Easy-to-read
6″ Meter**

**Use when
idling or
moving**



69⁹⁵
$5 monthly*

Exhaust Gas Analyzer

Clues you in on combustion problems and assists in making carburetor adjustments. Carburetor can be set while car is idling, or pickup unit can be hung on rear bumper, with receiver in car for precise settings on the road. Measures air-fuel ratios from 10.2 to 15, and percent of combustion. Color-coded Rich-Idle-Lean scale also indicates proper setting for smog control. Usable for propane and butane, too. 12 lbs.
19 A 4207 X. 69.95

AUTO ANALYZER

**Six instruments
in a single,
compact unit**

49⁹⁵
$5 monthly*

Low-priced Auto Analyzer

Solid-state auto analyzer, great for hobbyists, mechanics. Has scales for six different functions: 0-1000 and 0-5000 rpm; 0-60° dwell angle; 0-16 volts; 0-250 amps; ohms and point condition. Easy-to-read 6″ jewelled meter. Sequence testing procedure finds problems quickly and easily. Solid-state circuit. For 4, 6 or 8-cylinder engines, 6 or 12-volt systems, positive or negative ground. With batteries, leads.
19 A 4129. Wt., 5 lbs. 49.95

Schauer Battery Chargers and Boosters at low Allied prices

ı12 **Boost/Charger.** Uses
) VAC current for fast
of engines with dead bat-
lus rapid charging of 6 or
t batteries. Builds to 100
or more on 6 volt battery,
ps or more on 12 volt.
es at 20 amp rate. Auto-
temperature controlled
breaker. 7¼x10⅝x9½″.
3½-ft. DC leads, 10-ft.
rd. Wt., 15 lbs.
562X. 49.95

! **4-Amp Charger.** For 6 or
batteries. Charges in 5-14
ircuit breaker; ammeter.
½x5″. 115 V, 60 Hz AC.
008. Wt., 5 lbs. 9.95

B BR-312 6-Amp Automatic Charger. For 12-V batteries, operates without attention. Automatically shuts off when battery is fully charged, with "trickle charge" to keep battery at full capacity. Ammeter. Gold-color case, 9⅜x6x6½″. For 110-120 V, 60 Hz AC. 9 lbs.
19 A 4004. . . . . 19.95

C-6612 10-Amp Charger. 6- or 12-V batteries in 2-6 hrs. Circuit breaker, ammeter. 9⅜x6x6½″. 110-120 V, 60 Hz AC.
19 A 4010. Wt., 11 lbs. . . . 16.95

19 A 4009. **B-6612 6-Amp Charger.** Charges 6 or 12-V batteries in 3-7 hrs. 115 VAC. 9 lbs. . . 11.95

A

49⁹⁵
$5 monthly*

B

19⁹⁵ **$5 monthly***

B&K Test Equipment for TV and radio

Sweep and Marker Alignment Generator

349^{95}

- For easy TV alignment
- Ten standard IF markers
- Neon marker indicators

Model 415. Supplies every output needed for precision alignment of color or black-and-white TV sets: video sweep, IF sweep, modulated and unmodulated markers, channel 4 and channel 10 RF sweep, and 10.7 MHz sweep. Ten crystal controlled IF markers from 39.75 to 47.25 MHz, plus provision for external marker inputs. Exclusive marker tilt circuit permits horizontal or vertical marker positioning. Front panel display of IF response and chroma bandpass curves; can be viewed without disabling horizontal output stage of receiver. Has unity gain into oscilloscope, for easy calibration. Two ±0-25 VDC and one ±0-50 VDC bias supplies. Size, 9¾x18x12″. For 117 VAC.
21 A 4574 U. Shpg. wt., 26 lbs. 349.95

Deluxe T
Analyst

379^{95}

Pinpoint T
troubles in
minutes

Model 1077. Directly injects UHF, RF, IF, composite v
or audio signals into any stage of B&W or color trans
or tube-type sets—lets you view results directly on
screen. Generates plate and grid drive for sweep che
composite sync with adjustable amplitude and impeda
Crystal-controlled rainbow and keyed color bar patt
test sync, range or hue control, help align demodulators
adjust color convergence. AGC keying pulse; direct pic
tube modulation. 9¾x18x12″. For 117 VAC.
21 A 4172 U. Shpg. wt., 31 lbs. .37

8-in-1 transistor radio Analyzer

209^{95}

Traces circ
stage by s

Model 970. Combines signal tracer; transistor tester; A
FM, RF, IF and audio generators; 1.5-15 VDC sup
Tests transistors in-circuit with "Dyna-Trace" probe;
of-circuit for leakage, beta (0-300). Ranges: 0-2-20-200-
VDC; 0-2-200 mA, 0-2-5 Amp; ohms, 0-50K-500K-5 m
9x8½x15½″. With transistor guide. 105-125 V, 60 Hz
21 A 4367 U. Shpg. wt., 22¼ lbs. 20

Save $12.60
with professional degaussing coil

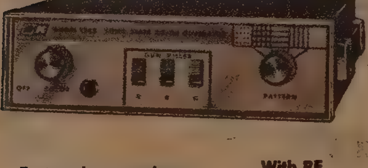
Degaussing Coil only $1 more

With coil **140^{95}**

1245 alone **139^{95}**

Portable Color Generator

Model 1245. For easy convergence and color adjustments. Connects directly to antenna terminals. Over 5000-μV RF output on TV channels 3, 4, 5. Crystal-controlled keyed rainbow color display, dot patterns, crosshatch, horizontal and vertical lines. Horizontal lines are one scanning line thick. Small dots with adjustable brightness. 2⅞x8½x8⅞″. With RF cable. 117 VAC. Degaussing coil is 13″ dia.; 9′ cord, switch. 6 lbs.
21 A 0001 L2U. With Coil. . . .140.95
21 A 4448U. 1245 Alone. 4 lbs. 139.95
21 A 4361. Coil Alone. 2 lbs. . .13.60



- Fast and easy color convergence, adjustment
- Easy connections to TV receiver

With RF cable **99^{95}**

Color Bar Pattern Generator

Model 1242. Solid-state design provides outstanding reliability and high stability over a wide temperature range. For fast, easy color convergence and adjustments. Gives dot, crosshatch, horizontal and vertical lines, plus color patterns on channels 3 and 4. Over 5000-μV RF output. Built-in gun killer has "mini-clips" for easy connection to set. Zener diode regulated power supply. Lightweight, rugged metal case with storage compartment. 2x6¾x9¾″ deep. RF output cable. 117 VAC.
21 A 4189 U. 2½ lbs. 99.95

Includ
vecto
scope

Intern
tent
analy
for e
diagn

Direc
low c
ity pr

279^{95}

Professional Diagnostic Scop

Model 1450. Features Intermi
Analyzer with visual indicators
electronic memory, for fast isol
of intermittent stage. Automatic
double-scale calibrated screen; d
p-p readings; 7-step attenuator.
zontal sweep, over 500 kHz (accu
ly shows 5 MHz signal). Vertical s
tivity, 25 mV rms/inch, 70 mV
inch; horizontal, 0.5 V rms/inch
axis input. 13⅜x8¾x17¼″.
21 A 4575 U. Wt., 26 lbs. . . . .

SHIPPING NOTE: Items with suffix U, W or Z in stock no. sen
or express. See Ordering Information

Professional Test Equipment by B&K

Dynamic-type Tube Tester 199.95 Ⓐ

"Dyna-Quik" Tube Tester 84.95 Ⓑ

del 707. Professional, dynamic-type mutual con-
stance tester features multiple-socket plug-in and
section, plus actual load condition testing. Checks
and TV tubes, thyratrons, VR's, auto radio hybrids,
ean hi-fi and industrial tubes. Can also check nu-
s; 10-pins, compactrons. Adjustable grid emission
over 100 megohm sensitivity. Also tests shorts, leak-
as, "life". 4½″ meter with Good-?-Replace scale.
15¾x5⅞″. For 105-125 V, 50-60 Hz AC.
165 U. Shpg. wt., 16 lbs. 199.95

del 606. Compact, emission-type tube tester is fast
l accurate. Checks most commonly-used TV and
tubes: nuvistors, 10-pins, 12-pin compactrons, VR's,
rons, auto radio hybrids, hi-fi and industrial tubes.
under simulated load. Has four switches; 4½″ Good-
ace scale; adjustable grid emission test with sensi-
to over 100 megohms. Also makes accurate tests for
, leakage and gas. Compact case, 8½x11x4⅞″, latch-
ver. For 105-125 V, 50-60 Hz AC.
164 X. Shpg. wt., 7 lbs. 84.95

94.95 *Handles all new CRT types*

Color CRT Tester/Rejuvenator

- **Handles high and low G2 picture tubes**
- **Checks and rejuvenates tube in TV set**

Model 465. Checks color or black-and-white CRT's for leakage, shorts, opens, emission. Predicts remaining useful life of picture tube. Operates tubes at correct filament (1-13 volts) and G_1 and G_2 voltages. Handles Hi and Lo G_2 tubes, low beam current types. Tests, rejuvenates 100° tubes, 19″ and 23″ types, color tubes including 90° and 23″ rectangular. Checks and corrects each color gun separately. 4½″ meter, neon indicators. Vinyl covered case, 10½x11½x4½″. 117 V, 60 Hz AC.
21 A 4490 X. Shpg. wt., 11 lbs. 94.95

CRT Probe with meter

HV-30. For direct high-
e readings at TV CRT's.
res triple-insulated probe,
able 50-µA meter. Meter
0-30,000 VDC; 16,000
V sensitivity; individual-
ibrated at 25,000 V. Ac-
±2% at 25,000 V;
full scale. Auto-tilt
14½″ long. Leads, case.
168. 2 lbs. 24.95

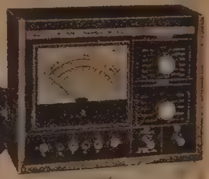
a-flex 3-point Probe

FP-3. Versatile probe pro-
instant connection to
printed circuit board
als. Automatically ad-
o any spacing, 1/32″ to ⅝″.
ct resistance less than
hm. Use with VTVM,
transistor tester.
576. 8 oz. 12.95

scope Convergence Aid

DS-1. Designed as a con-
t aid in faster and more
te static convergence of
r CRT. Also for detailed
and focus checks. Lets
iew screen from back of
Moveable clip-on magni-
creases dot size.
580. 8 oz. 7.95

24.95
12.95
7.95



Capacitor Analyst

109.95 *Tests in or out-of-circuit*

Model 801. For quick and accurate testing of foil, mica, ceramic and electrolytic capacitors. Tests electrolytics out-of-circuit for energy storage and effective capacitance, up to 2000 µF. Measures capacitance from 25 pF to 100 µF; values read on scale.

Tests in-circuit or out-of-circuit for leakage, with direct reading up to 50 megohms; shorts, 10 pF to 2000 µF (low as 25-ohm shunt); opens (low as 50-ohm shunt), down to 25 pF. Size, 5½x12¾x6¾″. For 105-125 V, 60 Hz AC.
21 A 4342 U. 11 lbs. 109.95

Transistor Analyst

99.95 *Tests AC beta, leakage, more*

Model 162. Latest design DC transistor tester tests both transistors and FET's in and out of circuit. Checks transistors from 1 mA to 1 amp collector current in steps of 10. Constant 1½-volt collector voltage.

Highly sensitive meter for accurate leakage tests. FET's are tested by measuring the GM of the device from 0-50,000 micromhos. GM test position can also be used to measure in-circuit impedance in the presence of transistors. Checks dual-gate FET's. 7 5/64x9⅛x4″. For 117 VAC. Shpg. wt., 5 lbs.
21 A 4579. . . . . 99.95

est equipment with no money down . . see page 438

Sencore performance-proven Test Instrument

169^{95} A

129^{95} B

Choice of
Battery or
AC Model

D
Battery Model
84^{50}

C 94^{50}

A **Model CG141 Color Bar Generator.** Te
perature-controlled solid-state circu
5 standard patterns: RCA color bars, cr
hatch, white dots, vertical and horizon
bars; movable single dot and cross. Sn
tuning for Ch. 2-6. Interlace control, hi
output chrome and sync signals, 4.5 M
crystal-controlled sound carrier. Steel ca
10x9x3½". 115 VAC.
21 A 4314 U. Shpg. wt., 9 lbs.........16

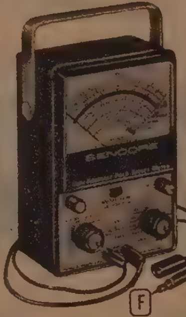
B **Model CG18 Color Bar Generator.** B
tery-powered. 10 standard keyed c
bars, 10 vertical lines, 14 horizontal li
crosshatch, adjustable white dots. Sol
state, crystal-controlled. Snap tuning
Ch. 3/4/5. Interlace control, 4.5 M
sound carrier. 9½x7¾x3¾". Requires
"C" batteries below.
21 A 4525 U. Shpg. wt., 7 lbs.........129.

C **Model SS137 TV Sweep Generator.**
sweep, sync. HV work. Universal ho
zontal/vertical oscillators substitute
TV's. Vertical test signal. 300 μA meter
AC, p-p, DC V, DC current, 2d anode
30 kV. 9x10x3½". Probe, leads 115 VA
21 A 4400. Shpg. wt., 10 lbs..........94.

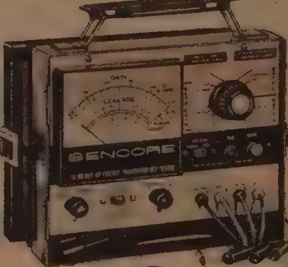
D **Model CG10 Color Bar Generator.** C
tal-controlled, solid-state. Color b
dots, crosshatch, vertical, horizontal li
10 keyed color bars. Interlace cont
Zener-reg. battery power. 3½x10¼x8
Order 8 "C" batteries, below.
21 A 4469 U. Shpg. wt., 5½ lbs.........84.
18 A 5078. "C" Batteries. 4 oz.....**Pkg. 2/3**

CG12 Generator. Same as CG10, but for
VAC, 4.5 MHz crystal-controlled signal.
21 A 4526 U. Shpg. wt., 8 lbs..........109.

E



F



G

H

E **Model FE-14 Field-Effect VOM.** FET's in differential circuit for zero warmup time, stability. 15-meg input. DC, 10 meg AC. ½-V zero center scale. DCV/ACV rms: 0-1-3-10-30-100-300-1000. ACV p-p: 0-2.8-8.4-28-84-280-840-2800. Ohms: 0-1000-10K-100K, 0-1000 meg. DC curr., 0-100 μA, 0-1-10-100 mA, 1A. 4½" meter. 7¼x5x3". Leads. Needs one 9V and "C" batt. HV probe below.
21 A 4138. Shpg. wt., 4 lbs..........................69.95

F **Model FE-16 Field-Effect VOM.** High-accuracy model (±1.5% DC and ±3% AC). 4½" meter and knobs. Low circuit loading, true zero center scale. Meter-tilting metal handle, mirrored scale. Ranges same as FE-14 above. 15-meg input DC, 10 meg AC. Vinyl-clad steel case, 7¼x5x3". Leads. Requires one 9V and "C" batt.
21 A 4183. Shpg. wt., 5 lbs..........................84.50
21 A 4139. 39A19 High-V Probe. To 30 kV. 8 oz..........9.95

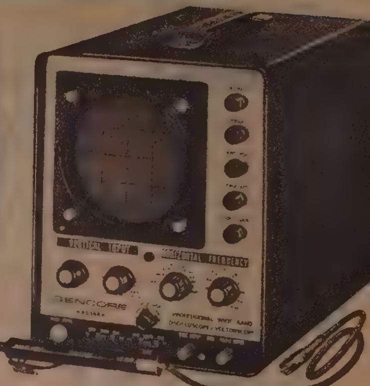
G **Model TF17 Transistor/FET Tester.** Tests FET's in or
of circuit for true G_m gain in micromhos; transis
for AC current gain in Betas. Shows leakage of FET (I
and transistor (I_{CBO}) in μA. Separate tests for high-po
and RF transistors; I_{DSS} current check for matching FE
4½" meter. Vinyl-clad steel case, 9½x7¾x3¾". With m
ual listing 12,000 types. 115 VAC.
21 A 4527 U. Shpg. wt., 7 lbs.........................10

H **Model CR143 Color Picture Tube Tester.** Tests color
b/w tubes. Automatically checks color-tube guns
tracking at all settings of brightness control. Short t
emission-test with pure DC, life test. Automatica
controlled rejuvenation circuit brings low-emission t
to life, removes shorts, equalizes color-tube gun curre
Vinyl-covered case, 10x9x3½". 115 VAC.
21 A 4286 U. Shpg. wt., 11 lbs.........................11

SHIPPING NOTE: Items with suffix U, W or Z in stock no. sent
or express. See Ordering Information pages

r the radio and television technician

MIGHTY MITE V
SENCORE



ighty Mite V" Tube Tester

50
- Test Over 3000 Types
- Full Cathode Current

TC 142. Cathode-emission tester curate testing. "Third hand" t cuts set-up time. Tests over types including compactrons, , nuvistors, frame-grid, 10-pin, ovals. Grid leakage measured 100-meg circuit. Stethoscopic test. Vinyl-clad steel case, dele lid. 10x9x3½". 115 VAC.
284 X. Wt., 9 lbs. 84.50
Tube Tester. Similar to above, stant-on solid-state circuit.
572 U. Wt., 9 lbs. 89.95

Deluxe Sweep and Marker Generator

395^{00}
- Ultra-Linear Sweep
- 3 Cables for Hookup

Model SM152. Solid-state. Aligns tuner, IF, chroma bandpass—each stage individually, or overall. Ultra-flat linear sweep output, all channels from 10-920 MHz. Sweep width calibrated, 0.3-15 MHz; RF sweep, 10 μV to 0.1 V. Pushbuttons select 8 crystal-controlled true post-injected IF markers. Two preset 3.58 MHz chroma outputs. 10" dial shows range in use. Only 3 cables for hookup. 13⅝x9½x5¾". Leads, probes. 115 VAC.
21 A 4528 U. Wt., 15 lbs. 395.00

Oscilloscope/Vectorscope

229^{50}
- Converts Instantly
- For Color TV Chroma

Model PS148. Combines wideband, hi-sensitivity scope with vectorscope for complete troubleshooting and color TV chroma alignment. Vectograph screen shows degree of chroma demodulation. Vertical amplifier: 10 Hz to 5.2 MHz, ±1 dB; rise time, .055 μsec; sensitivity, .017 V rms/in. Five sweep ranges, 5 Hz to 500 kHz. Input: 27 or 2.7 meg. Retrace blanking. Use with keyed color bar generator. 11x9x15½". Direct/lo-cap probe. 115 VAC.
21 A 4438 U. Wt., 22 lbs. 229.50

del RC144 Component Substitutor. Proes 36 most-needed resistors, capaci-24 ½-watt and 1-watt resistors from ns to 5.6 megs; 10 capacitors, 100 pF μF at 600 V; two electrolytics, 10 μF μF at 450 V. Only 4x3x2".
.529. Shpg. wt., 12 lbs. 17.95

del RC146 Component Substitutor. 75 ues of resistors, capacitors, rectifiers t substitution. Twelve 1-watt resis-0 to 5600 ohms; 12 ½-watt, 10K to gs; 20-watt power, 2.5-15,000 ohms; 0V capacitors, 100 pF to 0.5 μF; ten lytics, 2-250 μF, 450V; 0.5 A seleniad silicon rectifier. Surge-protected. 4¾x4¾".
288 X. Shpg. wt., 3½ lbs. 49.95

del MU150 Dynamic Mutual Conducte Tube Tester. Speedy, with lab accu-Checks over 3000 foreigh and domeses. Full rated cathode current drawn every tube. True G_m in micromhos 5000 Hz square wave. 100-meg grid e test. Stethoscopic test for shorts. est. Vinyl-clad steel case. Plastic- tube chart. 17x11x4". 115 VAC.
437 U. Shpg. wt., 18 lbs. 229.50

del FS134 Solid-State TV-FM Fieldength Meter. For all TV channels, and UHF, plus FM. Sensitivity: 30 ccuracy: VHF/FM, ±3 dB; UHF, . Calib.: 0-60 dB, 30-30,000 μV, X1, X100. IF/image rej.: over 50 dB 30 dB UHF. Input: 75 or 300 ohms, n balun. Bandwidth: 500 kHz. Speak-0x5". Order 9 batteries below.
340 U. Shpg. wt., 9 lbs. 229.50
078. "C" Batteries. 4 oz. . . . . Pkg. 2/33¢

Handy "36"
SENCORE

A

17^{95}

SENCORE
Handy 75

49^{95} B

C

229^{50}

D

229^{50}

RCA high-accuracy Test Instruments

A 95⁰⁰

B 65⁰⁰

C 139⁰⁰

D 269⁰⁰

A Model WA-504A Sine/Square Wave Generator. Provides tunable sine or square wave audio frequency signal. Covers 20 Hz to 200 kHz in four ranges. Calibrated dial with vernier drive. Ultra stable, less than ±1.5 dB amplitude variation. Can be used for testing audio amplifiers; speakers and enclosures; finding L-C combinations in circuits. Total sine wave harmonic distortion under 0.25%. 7¾x5⅝x4¾". With leads. 117 VAC.
21 A 4352. Shpg. wt., 5 lbs.........................95.00

B Model WR-50B RF Signal Generator. Excellent RF signal generator is ideal for educational uses, and for accurate maintenance and troubleshooting of FM-AM radios and TV's. Produces accurate CW and AM signals from 85 kHz to 40 MHz plus 455 kHz and 10.7 MHz sweeps; 400 Hz AF oscillator for audio testing of speakers, amplifiers, etc. Permanent test cables. Case, 7¾x5⅝x4¾". Carrying handle. For 117 VAC.
21 A 4192. Shpg. wt., 7 lbs.........................65.00

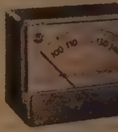
C Model WO-33A 3-inch Scope. For observing co burst signals, other TV work. Dual-band ver amplifier response: narrowband, 3 mV rms/inch, 20 H 150 kHz, −3 dB; wideband, 100 mV rms/inch, 5.5 Hz t MHz, −3 dB. Sweep oscillator, 15 Hz to 75 kHz. Sync nization: internal plus or minus, external. Line sweep, adjustable phase. 3" flat-faced CRT. Metal case, 8¾x 10¼". Combination test probe. 117 VAC.
21 A 4276 U. Shpg. wt., 16 lbs.........................13

D Model WO-91C Dual-Band 5" Scope. Professiona scope for color and B&W TV. Has sync separation stable sweep lock-in; 10 Hz to 100 kHz continuous sw Dual-band response and sensitivity; wideband, ±1 dB Hz to 4.5 MHz; narrowband, −6 dB, 10 Hz to 1.5 MH −1 dB, 10 Hz to 0.5 MHz. Sensitivity; wideband, 0.1 p-p/inch; narrowband, 0.5 V p-p/inch. 13½x9x16¼". VAC. With WC-300B Direct/Low-Capacitance test pr
21 A 4543 U. Shpg. wt., 30 lbs.........................26

E 40⁰⁰

F 295⁰⁰

G 256⁵⁰



H 18⁵⁰

E Model WP-26A TV Isotap. Adjustable isolation/autotransformer provides instant high/low/medium line voltage. Matches line voltage of 105-130 V, 50-60 Hz, in 5-volt steps. Output: 105, 115 or 130 V. Isolation output, 400 VA; autotransformer, 500 VA. 5¾x5x4⅜".
21 A 4117. Shpg. wt., 15 lbs.........................40.00
Model WP-25A. As above, but 275 VA isolation output.
12 A 4171. Shpg. wt., 15 lbs.........................27.50

F Model WR-69A Sweep Generator. For visual alignment of TV and FM receivers. Ideal for color TV. Covers VHF TV channels and 88-108 MHz FM band. Preset positions for channels 2-13; FM, video, chrominance and IF frequencies. VHF output on fundamentals. IF/video output: 50 MHz continuously tuned. Bandwidth, 50 kHz to 20 MHz; 12 MHz max. on TV. 10x13⅝x7". 117 VAC.
21 A 4347 U. Shpg. wt., 18 lbs.........................295.00

G Model WR-99A Marker Generator. Supplies fundamen frequency RF carrier for precision alignment of TV FM receivers. Crystal calibrator beats at 1 or 10 MHz. C ers 19-260 MHz in 8 bands. Has heterodyne detector, am fier and speaker. 4.5 MHz crystal for alignment of inter rier IF amplifiers. Triple markers. Slide-rule tuning 13½x10x7". For 105-125 V, 50-60 Hz AC.
21 A 4329 U. Shpg. wt., 21 lbs.........................25

H Model WV-120A AC Power Line Monitor. For lab, s use. Reveals fluctuations or "bounces" in AC line v age. True rms reading, 100-140 VAC. Accuracy, ±2% 120 V, ±3% at 100/140 V. 25-400 Hz. 3$\frac{15}{16}$x5x3$\frac{1}{16}$".
11 A 4193. Shpg. wt., 1½ lbs.........................1
Model WV-503A AC Power Line Monitor. (Not illus.) Sam above, but reads 200-280 VAC. 25-400 Hz frequency.
21 A 4398. Shpg. wt., 1½ lbs.........................1

RCA Test Equipment

52^{00}

79^{00}

66^{75}

- 6½" mirrored scale
- ±3% accuracy

88^{50}

Model WV-38A VOM. Highly accurate portable instrument features 2-color 5" meter with sensitive A movement; flat response to 50 on 2.5, 10 and 50 V ranges; extra 0.25 and 1.0 VDC ranges; pre-n 1% resistors. Has 39 ranges: AC DC volts, 0-2.5-10-50-250-1000-, plus 0.25-1 VDC. Ohms, 3 es to 20 megohms. DC current, μA, 0-1-10-100-500 mA, 0-10 s. dB, −20 to +50. Input resis-e: DC, 20,000 ohms/volt; AC, ohms/volt. Accuracy: ±3% DC, AC. Polarity reversal switch, out protection, clips for test lead ge. With test leads. 6⅞x5¼x. Factory wired and tested. Shpg. 3½ lbs.
4219. .52.00
4220. WG-270A Case. 1 lb. . .5.25

[B] **Model WV-500B Solid-State VoltOhmyst.** Battery-operated voltmeter. Has 8 VDC ranges from 0.02 to 1500 V; 7 AC (rms) ranges from 0.1 to 1500 V; AC (p-p) ranges from 0.5 to 4200 V. DC current, 8 ranges from 2 μA to 1.5 amps. Ohms, 7 ranges, 0.2 ohm to 1000 megohms. 11 megohm input resistance, ±3% accuracy. 6⅞x5¼x3⅛".
21 A 4172. Shpg. wt., 3½ lbs. . . .79.00

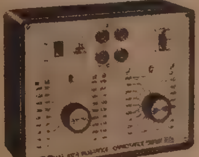
[C] **Model WT-501A In or Out-of-Circuit Transistor Tester.** Tests I_{CBO}, I_{CEO}, and DC Beta. Plots forward current transfer ratio up to 1 amp; adjustable collector current. (Not for FETs or MOS transistors.) Front panel NPN, PNP sockets. Low impedance. Leads, battery. 6⅞x5¼x3⅛".
21 A 4318. Shpg. wt., 2¾ lbs. . . .66.75

Resistance-capacitance Substitution Box

el WG-412A. Has 36 one-watt tor values (15 ohms to 10 megs), 18 600-volt capacitor values pF to .22 μF). ±10% tolerance. ct values separately, in series, or llel RC combinations. With test s, clips. 6⅞x5⅜x2⅜". Factory d and tested. Wt., 1 lb.
.4461. .30.00

30^{00}

Ideal for circuit designing



RCA test equipment Probes and Accessories

ock No.	Mfr's Type	Description	Shpg. wt.,	EACH
4212	WG-289	High Voltage probe extends WV-98C to 50 kV. Use multiplier below.	8 oz.	13.50
4209	WG-297	Extends WV-77E or WV-38A to 50 kV. Use multiplier.	8 oz.	13.50
4213	WG-206	1090 megohm multiplier to be used with High Voltage probes above.	2 oz.	3.75
4274	WG-210	900 megohm multiplier to be used with High Voltage probes above.	2 oz.	3.75
4275	WG-211	495 megohm multiplier to be used with High Voltage probes above.	2 oz.	3.75
4215	WG-301A	Crystal diode probe for WV-98C (to 250 MHz).	8 oz.	8.25
4366	WG-351A	Crystal diode probe for WV-77E (to over 100 MHz).	4 oz.	5.25
4279	WG-300B	Direct/low capacitance probe for RCA scopes.	4 oz.	12.00
4378	WG-350A	Demodulator probe for WO-33A oscilloscope.	4 oz.	5.25
4380	WG-349A	Direct/low capacitance probe for WO-33A scope.	4 oz.	6.75
4182	WG-299E	AC-Ohms/DC probe for use with WV-98C	4 oz.	9.75
4353	WG-411A	Slip-on High-voltage probe for WG-299D and WG-410A. To 50,000 volts when used with WG-206 multiplier.	12 oz.	13.50
4323	WG-416A	I.F. Test Block. 180-ohm detector and IF transformer loading circuit. Connects to scope.	6 oz.	15.25
4458	WG-418A	Mixer grid matching pad. Couples generator output.	6 oz.	13.50
4198	WG-307B-K	TV bias supply kit. 3 output voltages, adj. 0 to −15 V for RF, IF or AGC bias.	1½ lbs.	13.50
4196	WG-295	Video multimarker, Provides 7 markers for response curves in color TV. Connects to sweep gen.	8 oz.	33.50
4197	WG-304B	Radio Frequency Modulator. Checks response of Television receivers.	4 oz.	18.00

Model WV-98C VoltOhmyst. Precision VTVM gives direct p-p reading of complex wave-forms. 11-megohm input resistance. Reads: AC and DC volts, 0-1.5-5-15-50-150-500-1500 (plus 0-0.5 VDC range); 7 AC p-p ranges from 4 volts to 4200 V; 7 ohms ranges from 0.2 ohm to 1000 megohms. With probe. 6½x7x3¾". 105-125 VAC.
21 A 4211. Shpg. wt., 6 lbs. 88.50

Model WV77E VTVM. Above, except 4½" meter, no 0-0.5 VDC scale, no AC/DC probe. 7¾x5⅜x4¾".
21 A 4208. Shpg. wt., 5 lbs. 52.00

118^{00}

Model WT-509A Picture Tube Tester. Tests color and black-and-white picture tubes for emission quality, leakage, shorts. Has five test sockets, including universal adapter for any tube type. "Activate" function improves performance of some low-emission tubes. Solid-state, with triac device for controlling internal voltages. Sensitive cut-off adjustment. 12x10x5". For 105-132 V, 50-60 Hz AC.
21 A 4183. Shpg. wt., 12 lbs. . .118.00

Transistor and diode Checker

18^{00}

- Tests Both NPN and PNP Transistors
- Easy-to-Read Meter

Model WC-506A. Checks relative gain and leakage of out-of-circuit transistors, plus relative front-to-back current ratio of diodes. Transistor socket, color-coded leads. (Not for FETs or MOS transistors.) Uses 2 "AA" batteries (not included). 3¾x6¼x2".
21 A 4320. Shpg. wt., 1 lb. 18.00

For complete selection of Eico Kits, see pages 486 to 488

Eico wired Test Equipmen

A

109.95

149.95

B

249.95

C

169.95

A Versatile Color-Bar/Pattern Generator

Model 385. Battery-powered. Color-coded gun killers eliminate any one color or combination of two or more colors from display. Generates 10 color bars, crosshatch and dot patterns, horizontal and vertical lines. Feeds directly to TV antenna terminals. Low current drain. 2½x8½x8⅜". With test leads.

21 A 4538 U. Shpg. wt., 9 lbs.................109.95

21 A 4537. Model 385-K Kit. Shpg. wt., 9 lbs..........79.95

B Deluxe 5" wideband Oscilloscope

Model 460. Flat from DC to 4.5 MHz, usable to 10 MHz. Reproduces 3.58 MHz color TV sync burst. Vertical Sensitivity: 10 mV/inch. Input Impedance: 3 meg shunted by 35 pF. 4-position attenuator. Full screen DC positioning; 2X horizontal. Sweep: 10 Hz to 100 kHz, plus low-frequency with ext. capacitor. Plus, minus, internal, external, line-sync. 13x8½x16". 105-125 V, 50-60 Hz AC.

21 A 4157 U. Shpg. wt., 25 lbs..................149.95

21 A 4158 U. Model 460-K Kit. Shpg. wt., 25 lbs.........99.95

C Professional 5" wideband Oscilloscope

Model 465. Flat DC to 8 MHz, usable to 10 MHz. Vert
Sensitivity: .034V p-p/cm. Horizontal Sensitivity: 0.0
p-p/cm, DC to 1 MHz. Automatic sync limiter, full retr
blanking. Sweep: 10 Hz to 100 kHz, plus 30 Hz vertical
7875 Hz horizontal. Plus, minus, internal, external,
sync. 12¾x8½x17½". For 117 VAC.

21 A 4536 U. Shpg. wt., 27 lbs......................24

21 A 4535 U. Model 465-K Kit. Shpg. wt., 27 lbs.....17

D Portable 3" wideband Oscilloscope

Model 435. Flat DC to 4.5 MHz, usable to 10 MHz. Ve
cal Sensitivity: 18 mV rms/cm. Push-pull 3-stage dir
coupled amplifier. Zener diode calibration. Four-posi
frequency-compensated decade attenuator. Reads DC
p-p AC from 50 mV to 500 V. Sweep: 10 Hz to 100 k
plus 30 Hz vertical and 7875 Hz horizontal. 8½x5¾x12
For 105-125 volts, 50-60 Hz AC.

21 A 4335 U. Shpg. wt., 18 lbs......................16

21 A 4282 U. Model 435-K Kit. Shpg. wt., 18 lbs.....11

54.95

44.95

149

Sine/Square Wave Generator

Model 377. Sine Wave Range: 20 Hz to 200 kHz in 4 bands. Response: ±1½ dB, 60 Hz to 150 kHz. Square Wave Range: 60 Hz to 50 kHz in 4 bands. Output: 10 volts across 10K ohms. Hum: under 0.4% of rated output. Accuracy: ±3%. Wien Bridge oscillator circuit uses 1% resistors. Choke filtering in power supply. 7⅛x11⅛x7⅝". For 110-120 V, 50-60 Hz AC.

21 A 4134 X. Shpg. wt., 14 lbs...54.95

21 A 4135 X. Model 377-K Kit....39.95

Stable RF Signal Generator

Model 324. Ideal for AM, FM radios, hi-fi's, other equipment. Provides 150 kHz to 435 MHz RF output; 150 kHz to 145 MHz on fundamentals (6 ranges). Accuracy: ±1.5%. Has internal variable 400-Hz modulation. Also takes external modulation sources. Has RF attenuators. 6:1 vernier drive. Rugged case, 8x10x4¾", carrying handle. For 117 VAC.

21 A 4140. Shpg. wt., 10 lbs.....44.95

21 A 4141. Model 324-K Kit......32.95

Sweep/Marker Generato

Model 369. Signals are unaffected
receiver. 5 sweep ranges cover
220 MHz. 3 marker ranges cover
75 MHz on fundamentals, 60 to
MHz on harmonics. 4.5 MHz cry
supplied for accurate marker ch
6:1 vernier drive; easy-to-read
scales. Retrace blanking for
3-stage AGC circuit. 50 ohms.
12½x7". 110-120 V, 50-60 Hz

21 A 4308 U. Shpg. wt., 18 lbs..14

21 A 4307 U. Model 369-K Kit....9

E

99.95

74.95

F

Deluxe CRT Tester/Rejuvenator . . Audio Genera

E **Model 633 Tester/Rejuvenator.** 12 filament voltages, emi
test. Safely repairs shorts, welding of cathode. Sw
selects individual guns of color CRT's for testing. 4½" m
Transformer-isolated supply. Luggage-type case, 5¾x1
9¼". Tube chart, cables. 117 VAC.

21 A 4540 U. Shpg. wt., 10 lbs.............................9

21 A 4539 U. Model 633-K Kit. Shpg. wt., 10 lbs...........6

F **Model 379 Solid-state Sine/Square-Wave Generator.**
Hz to 2 MHz in 5 bands. Output Voltage: (sine wave)
V rms into high impedance, 0-6.5 V into 600 ohms; (sq
wave) 0-10 V p-p; rise time at 20 kHz less than 0.1 μS. M
mum Distortion: 0.25%. 7½x8½x8½". 117 V. 50-60 Hz

21 A 4244. Shpg. wt., 9 lbs..................................7

21 A 4177. Model 379-K Kit. Shpg. wt., 9 lbs..............

SHIPPING NOTE: Items with suffix U, W or Z in stock no. sen
or express. See Ordering Information p

r every service purpose

For complete selection of Eico Kits, see pages 486 to 488

95

139^{95}

69^{95}

Tube and Battery Tester

l 636. Tests 800 radio, TV tubes athode emission, leakage, shorts, elements, intermittents. Tests, r load, commonly used batteries 1.5 to 90 volts. 3-color meter. sformer power supply. Black ite case, 8⅝x7½x3⅛". With manual. 117 VAC.

4238. Shpg. wt., 4 lbs......44.95
4544. **Model 636-K Kit** 29.95

Tube and Transistor Tester

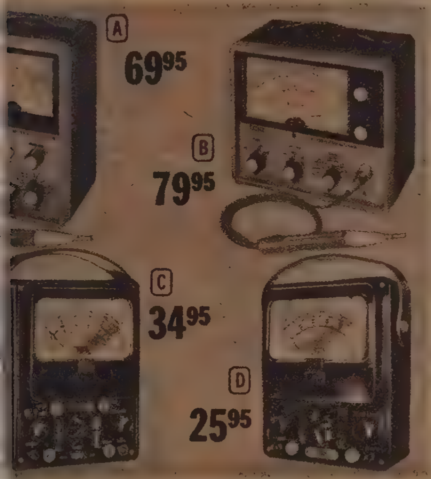
Model 667. Combines mutual conductance (Gm), plate conductance (Gp), and peak emission tests to give a single reading of tube quality. Gain, leakage tests for transistors. Big 4½" meter. Multicircuit level switch. 4½x15x12". For 115 VAC.

21 A 4142 U. Shpg. wt., 23 lbs..139.95
21 A 4143 X. Model 667-K Kit....89.95
21 A 4144. CRU CRT Adapter. 1 lb..9.95

Portable Tube Tester

Model 635. Tests all tubes, including TV picture tubes. Checks dynamic cathode emission, shorts, grid leakage, gas. Has pin straighteners for all types; burnout-protected 3½" D'Arsonval meter; short, grid-leak, and power indicators. Luggage case, 4x12½x9". 117 VAC.

21 A 4542. Shpg. wt., 4 lbs......69.95
21 A 4541. Model 635-K Kit......44.95



Values in accurate FET Voltmeters and VOM's

A Model 240 Voltmeter. Impedances: DC, 11 megs; AC, 1 meg. 25 Hz to 2 MHz. Ranges: DC and AC Volts, 0-1-3-10-30-100-300-1000; p-p AC Volts, 0-2.8-8.5-28-85-280-850-2800; Resistance, 0.2 ohm to 1000 megs in 7 ranges. 5¾x8½x4¾". AC or batteries. With Uniprobe.

21 A 4305. Shpg. wt., 6 lbs......................69.95
21 A 4304. Model 240-K Kit. Shpg. wt., 6 lbs.............49.95

B Model 242 Voltmeter/mA. Imp.: DC, 11 megs; AC, 1 meg. 25 Hz to 2 MHz. DC, AC Volts, mA: 0-1-3-10-30-100-300-1000; p-p AC Volts, mA: 0-2.8-8.5-28-85-280-850-2800: Resistance: 0.2 ohm to 1000 megs, 7 ranges. With Uniprobe. 7½x8½x5". 117 VAC or batteries (req. three 9-V, one "D").

21 A 4316. Shpg. wt., 6 lbs.......................79.95
21 A 4306. Model 242-K Kit. Shpg. wt., 6 lbs............59.95

C Model 565 VOM. 20K ohms/V DC, 1000 ohms/V AC. AC, DC V: 0-5000; DC: 0 μA to 10 A (5 ranges). Ohms: 2K-200K, 0-20 meg; dB: −12 +55. 6¾x5¼x3". Batteries.

21 A 4269. Less leads. Shpg. wt., 4 lbs.................34.95
21 A 4268. Model 565-K Kit.........................25.95
21 A 4271. Model 555. Above assembled, 1% resistors....39.95

D 566 VOM. 1000 ohms/V. AC, DC: 0-5000V; 0-10 mA, 0-1A; Ohms: 0-10K-100K-1 meg; dB: −20 to +69. 6¾x5¼x3".

21 A 4261. Less leads. Wt., 3 lbs.......................25.95
21 A 4260. Model 566-K Kit. Shpg. wt., 3 lbs.............19.95
21 A 4263. Model 556. Above, assembled; 1% resistors...29.95

Bridge/R-C-L Comparator and VTVM's

del 950 Bridge. 0.5 ohm to 500 megs, 10 pF to 5000 (4 ranges). 0.05-20 comparator range. 0-500 volts apacitors for shorts, leakage. Measures power factor trolytics. Less leads. 8x10x4¾". 117 VAC.

100 X. Shpg. wt., 10 lbs.......................39.95
101. **Model 950-K Kit.** Shpg. wt., 10 lbs...........29.95

del 232 VTVM. Uni-Probe lets you measure AC, DC, ns with one probe. AC p-p V: 0-4-14-42-140-420-1400- DC V: 0-1.5-5-15-50-150-500-1500; Ohms: 0.2 to 1000 ranges. 30 Hz to 3 MHz. 8½x5x5". 117 VAC.

236. Shpg. wt., 5 lbs...........................49.95
235. **Model 232-K Kit.** Shpg. wt., 5 lbs............34.95

del 249 VTVM. Uni-Probe. AC p-p V: 0-4-14-42-140- -1400-4200; DC V: 0-1.5-5-15-50-150-500-1500; Ohms: 1000 meg (7 ranges). Balanced bridge circuit, 1% mul-; zero center scales. 8½x13x5". 117 VAC.

234. Shpg. wt., 9 lbs...........................59.95
233. **Model 249-K Kit.** Shpg. wt., 9 lbs............39.95

E
39^{95}
F
49^{95}
G
59^{95}

Quality Test Equipment for every purpose .

High-impact case

20,000 ohms/volt VOM

12^{95} *Versatility, low circuit loading*

Eico 20A3. Modestly priced precision pocket-portable VOM with rugged double-jewelled D'Arsonval movement. Ranges: DC Volts, 0-0.25-2.5-10-50-250-1000; AC Volts, 0-10-50-250-500-1000 (AC sensitivity, 10,000 ohms/volt); DC Current, 0-50 μA, 0-25-250 mA; Resistance, 0-7K-700K ohms, 0-7 megs; Decibels, −10 to +36. Accuracy, ±2%. 5⅛x3⅜x1⅜". With batteries, leads.
21 A 4571. Wt., 1¼ lbs.....12.95

Pocket lab

30,000 ohms/volt VON

19^{95} *With antiparallax mirror-back scale*

Eico 30A4. Professional-typ
pocket-portable VOM with ove
load-protected D'Arsonval mov
ment. Ranges: DC Volts, 0-0.
3-12-60-300-600-1200-3000; A
Volts, 0-6-30-120-600-1200 (A
sensitivity, 10K ohms/volt); D
Current, 0-30 μA, 0-60-600 m
Resistance, X1, X100, X1
X10K; Decibels, −20 to +63
5 ranges. Accuracy ±2%. 5⅞
3³⁄₁₆x1¹¹⁄₁₆". Batteries, leads.
21 A 4570. Wt., 1¾ lbs. ...19.

149^{95} $8 monthly*

RF Signal Generator

Precision E-200C. 88 kHz to 110 MHz on fundamentals, to 440 MHz on harmonics. Has AVC-AGC substitution system. 0-100% modulation. Outputs: modulated RF, unmodulated RF, externally modulated RF, 400-Hz sine-wave audio. adjustable 0-80 V peak. 1% dial accuracy. 13x11½x6⅝". For 117 V, 60 Hz AC.
21 A 4289 U. 16 lbs...149.95

199^{95} $10 monthly*

Audio Generator

Precision E-310. Sine/Square waves, 5 Hz to 600 kHz on fundamentals in 5 bands. ±2% accuracy, 50 Hz to 600 kHz; ±1 Hz, 5-50 Hz. Less than 1% distortion at 10 V rms output. Four-step attenuator. Sine-wave output, 10 V rms (600 ohms); square-wave, 10 V p-p. Rise Time, 0.20 μsec. 9x11½x11¼". 117 V, 50-60 Hz AC.
21 A 4287 U. 24 lbs...199.95

289^{95} $15 monthly*

5" wideband Scope

Precision E-550B. 5-MHz bandwidth. P-p voltage calibrator. Resp., vertical, ±1 dB, 10 Hz to 5 MHz; horizontal, ±1 dB, 10 Hz to 1 MHz. Sensitivity: vertical, 0.010 V/inch; horizontal, 0.100 V/inch. Sweep: 10 Hz to 100 kHz. Sync: 30 Hz and 7875 Hz. 18½x14x8¼". 117 V, 60 Hz AC.
21 A 4226 U. 47 lbs...289.95
21 A 4227. Probe. 1 lb. 29.95

HV Probe with Meter

19^{95} $5 monthl

Eico HVP-5. High-voltag
probe reads to 30,000 V
features built-in vol
meter. Barriers isolat
high-voltage tip fro
probe handle and mete
For fast measurements
TV CRT's, other hig
voltage equipment. Eas
to-read meter, alligat
ground clip. Needs no ba
teries. 14½" long. 2 lbs.
21 A 4237.............19.

99^{95} $5 monthly*

Tester/Rejuvenator

Commander 857. Color, B&W CRT's. Voltmeter measures to 50 kV DC (with probe below). Good-?-Replace scale. 3-step rejuvenation. 10½x4¾x12⅝". Chart. 117 VAC.
21 A 4440 U. 5 lbs.....99.95
21 A 4346 U. 855. Above, less adj. G2, adapters......79.95
21 A 4441. 857-9 HV Probe. To 50 kV DC. 3 oz...12.95

74^{95} $5 monthly*

Solid-state FET VOM

Commander 876. FET VOM for highest impedance and stability. Ranges: AC Volts, 0.3 V to 3 kV in 9 ranges; DC volts, 0.3 V to 1 kV in 8 ranges; DC Current, 100 μA to 1 A in 4 ranges; Resistance, 7 ranges, Accuracy ±2% DC, ±4% AC. Resp. 10 Hz to 10 MHz. 9¼x5¾x6⅜". Batts., leads.
21 A 4302. 6½ lbs.....74.95

79^{95} $5 monthly*

Transistor Tester

Commander 830. Simplified Good/Bad test in and out of circuit. Protects transistors against accidental burnout. Tester is protected against burnout, too. Color-coded meter scales for rapid testing. Handsome luggage-type case with carrying handle. Pilot light. 6⅜x9¼x5¾". 117 VAC.
21 A 4267. 3 lbs. 79.95

99^{95} $5 monthly*

TV Color Generator

Commander 860. Crysta
controlled *silicon* transisto
solid-state generator for a
color adjustments. Has cen
tering, static convergence
fine tuning, dynamic con
vergence, linearity, 3-ba
color patterns. Gun kille
Handsome black leathere
case, 5x9x4". With ba
teries, leads.
21 A 4277 U. 3½ lbs. ..99.9

*See page 438 for full Credit detai

designed for today's rigid requirements

16^{95}

19^{95}
$5 monthly*

19^{95}
$5 monthly*

19^{95}
$5 monthly*

i-Box Resistor Box

roduces over 3400
onstandard values

pact resistor substi-
n box features unique
oard of resistor leads
ad of a control switch
resistor selection. Al-
faster selection of re-
nce values and permits
hand operation when
other equipment at
same time. Standard
e of 84 one-watt, 10%
tors from 2.7 ohms
22 megohms. Molded
olic case, removable
r. Size, 3x4x2¼".
4332. 10 oz. 16.95

30-kV CRT Test Probe

Direct readings
at TV CRT'S

Pomona 2900. For direct readings of cathode ray tube high voltages. Features triple-insulated probe, highly sensitive 50-μA meter. Reads 0-30,000 Volts DC. Has 20,000 ohms/volt DC sensitivity. Individually calibrated at 25,000 volts. Accuracy, ±2% at 25,000 volts, ±3% full scale. Easy-to-read meter. Needs no batteries or other power source. 14½" long. Shpg. wt., 2 lbs.
21 A 4160. . . . . 19.95

Transistor Checker

Tests transistors,
diodes, rectifiers

Provides standard basic tests, plus leakage, gain, open, and short tests. Leakage (ICO) current is accurate within 1/10 μA. Beta scale from 0-300 for precise gain checks. Has 0-500,000 ohms scale to check forward and reverse resistance of diodes and rectifiers. Heavy duty black bakelite case, 7x4¼x3⅛". With socket, leads, batteries, and full operating instructions. Japan.
21 A 4551. 2 lbs. 19.95

Solid-state DC Supply

Handiest equipment
on your workbench

Powers transistor radios, hearing aids, low-power amplifiers, more. Special heat-dissipation devices for cool operation under full load. Has isolating line transformer. Provides 0-10 V at 200 mA, 0-20 V at 150 mA. Panel meter monitors 0-20 VDC, 0-20 mA DC, 0-200 mA DC. AC ripple under 0.025 mV rms. Neon pilot light, fuse. 6¼x3⅝x1½" 110-120 V, 50-60 Hz AC. With leads. Japan.
21 A 4553. 1½ lbs. 19.95

Quick filament continuity checks

5^{95}

Voltage regulated 12^{95}

Filament Checker

Sencore FC147. Checks fila-
nent continuity of compac-
rons, novars, 10-pins, nu-
istors, and decals. Has
est leads for CRT filament
hecking. Doubles as neon
oltage indicator. Size, 4x
3x1".
1 A 4334. 1 lb. 5.95

Solid-state DC Supply

Handy small DC power supply with big current output. Provides smooth zener-regulated 12 VDC at up to 1 amp. Can power most auto tape players. Voltage-regulated within 10% of load. 110 VAC.
21 A 4385. 1 lb. 12.95

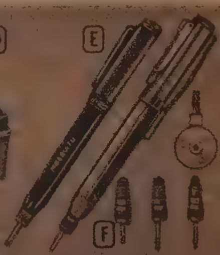
Handy low-cost Testers

A **Emico AC Voltage Tester.** Plugs into AC outlet, detects high or low line voltage. 0-150 volt range. Prongs swivel
0°. Damped 2" meter, ±5% accuracy. Shockproof.
1 A 4368. Shpg. wt., 8 oz. 3.38

B **AMF Circuit Tester.** Glow tester checks shorts, continuity, grounds, opens. Dim light indicates poor connection.
o light when resistance exceeds 10 ohms. Use for dead
ircuits only. Requires 2 penlight cells.
1 A 4370. Shpg. wt., 3 oz. 1.66

C **G-C Neon Glow Tester.** Use for finding hot AC leads, checking fuses, appliance repair. Lights from 60 VAC-
0 VDC to 550 VAC-VDC. With 5" leads.
1 A 4369. Shpg. wt., 3 oz. . . . . 44¢
1 A 4442. Above, for 5 to 50 volts. Shpg. wt., 3 oz. . . . 99¢

90^{00} $5 monthly*



D Solid-state Grid-Dip Meter

Millen 90651-A. Stable RF oscillator, solid-state DC amplifier and voltmeter. Taut-band movement. 2" meter reads from 1.7 to 300 MHz. Plug-in coils; 7 direct-reading scales. 7x3$\frac{3}{16}$x13⅜" high. 117 VAC.
21 A 4331. Shpg. wt., 8 lbs. 90.00
21 A 4324. Type 90651. Above, less DC amp. . . 78.50

Extra Coils. To extend frequency coverage. 3 oz.

Stock No.	Mfr's Type	kHz Range	EACH
21 A 4325	46702	925-2000	9.40
21 A 4326	46703	500-1050	9.40
21 A 4327	46704	325-600	9.40
21 A 4328	46705	220-350	9.40
21 A 4443	46706	165-225	9.40

Don Bosco Pen-Size Signal Tracers

E **"Mosquito."** Locates defective circuits. Cordless, detachable probe. Transistor oscillator generates signals rich in IF and RF harmonics. Couples to magnetic circuits without leads. Powered by 1 penlight-battery (included). 5⅝" long, ½" dia.
21 A 4301. Shpg. wt., 3 oz. 9.95

F **Stethotracer.** Detects low-level mW audio or modulated RF signal. Range, 60 Hz to 200 MHz 60 dB gain. 5⅝" long. ½" dia. Earphone, 3 attenuator probes, crystal-diode probe, ground lead, battery.
21 A 4292. Shpg. wt., 3 oz. 34.95

Simpson Test Equipmen

260-5

62.00

$5 monthly*

VOM Shown with Plug-In Adapter

Low-cost Model 260-5 VOM

- 20,000 ohms/VDC, 5000 ohms/VAC
- Accurate within ±2% on DC, ±3% on AC
- High-accuracy spring-backed jewel movement

Highly-reliable, low-cost VOM boasts spring-backed je meter movement; DC polarity reversing switch; full-w bridge rectifier for fast, easy, accurate readings. Has response from 5 to 50 kHz; AC accuracy of ±3%; DC ac racy of ±5%. Ranges: DC mV, 0-250; AC and DC V, 0- 10-50-250-1000-5000; AF Output V, 0-2.5-10-50-250; µA, 0-50; DC mA, 0-10-100-500; DC amps, 0-10; Res ance, 0-20 megs in 3 ranges with center-scale readings 12, 1200 and 120K ohms; Decibels, −20 to +50 in 4 ran Rugged case, 7x5¼x3⅛". Battery, test leads.
51 A 9199. Shpg. wt., 5 lbs. 62

51 A 5035. Model 260-5P VOM. Has the same fine feature above, but is also equipped with special sensor device complete protection against overloads and burnouts. W test leads and battery. Shpg. wt., 5 lbs.
51 A 5035 94

51 A 9200. Model 260-5RT. Model 260-5 in roll-top case. S 9x6⅜x4¾". Shpg. wt., 9 lbs. 68

51 A 9586. Model 260-5M RT. Model 260-5 in roll-top c with mirrored scale to prevent parallax. 10½ lbs. 70

Accessories for Simpson Series 260 and 270 VOM's

Probes, Leads and Carrying Cases. Burnout-proof Model 260-5P takes all accessories below, except Type 8375 Test Leads. See table for other models.

Stock No.	Type	Description	For Models	Lbs.	EACH
51 A 9210	0508	HV probe; 25 kV range	260-3,4 or 5	½	16.00
51 A 9202	0509	HV probe; 50 kV range	260-3,4 or 5	½	16.00
51 A 9196	8375	Leads; alligator clips L terms	260-3	½	2.75
51 A 9203	7500	Leads; banana plugs allig. clip	260-4	1	2.75
51 A 9151	0805	Ever-Redy Leather Case	260, 270, 303	2	13.00
51 A 9162	1818	Standard Leather Case	260, 270	2	11.00

Plug-In Adapters. Turn any 260 or 270 made since 1947 i 8 different testers. 4⅜x5$\frac{5}{16}$x3$\frac{1}{16}$". 2 lbs.

Stock No.	Type	Function	Description	E
51 A 9334	650	Transistor Tester	0-100 µA I_{co}, 3 beta ranges	4
51 A 9336	651	DC VTVM	0-0.5-1.0-2.5-5-10-25-50-100-250-500 V	46
51 A 9337	652	Temperature Tester	−50° to +250° F. in 2 ranges	46
51 A 9338	653	AC Ammeter	0-0.25-1-2.5-12.5-25 A; 50-3000 Hz	28
51 A 9339	654	Audio Wattmeter	17 µW to 100 W; 4/8/16/600 ohms	30
51 A 9340	655	Microvolt Attenuator	2.5-250,000 µV, decade steps	2
51 A 9342	656	Battery Tester	Up to 90 volts	2

Complete line of Simpson Test Equipment

(As Simpson releases new Test Equipment, Allied will place it in stock)

SIMPSON VOM'S

Stock No.	Mfr's Type	Description	Wt., Lbs.	EACH
51 A 9591	160	Compact VOM	6	53.00
51 A 9619	250	VOM	4	68.00
51 A 9620	255	VOM	4	90.00
51 A 9154	262	Microammeter VOM	6	80.00
51 A 9212	263	Dual-Sensitivity VOM	4	94.00
51 A 9153	269-2	Microammeter VOM	6	95.00
51 A 9209	270	AC-DC VOM	5	75.00
51 A 9228	270RT	AC-DC VOM	5	81.00

SIMPSON VTVM'S

Stock No.	Mfr's Type	Description	Wt., Lbs.	EACH
51 A 9148	303	AC-DC VTVM	6½	90.00
51 A 9152	303RT	AC-DC VTVM	8	97.00
51 A 9587 X	311	AC-DC VTVM	8	91.00
51 A 9623	312	AC-DC VTVM	5	93.00
51 A 9239	715	AC VTVM	5	80.00

OTHER SIMPSON TEST EQUIPMENT

Stock No.	Mfr's Type	Description	Wt., Lbs.	EACH
51 A 9163	240 VOM	Hammeter	3	43.00
51 A 9254	355 VOM	Midgetester	2	50.00
51 A 9197	362	Low Ohmmeter Micro-Tester	3	37.00
51 A 9165	370	AC Ammeter Micro-Tester	3	37.00
51 A 9166	372-2	Ohmmeter Micro-Tester	3½	37.00
51 A 9204	373	DC Milliammeter Micro-Tester	3	37.00
51 A 9205	374	DC Microammeter Micro-Tester	3	37.00
51 A 9206	375	DC Ammeter Micro-Tester	3	37.00
51 A 9207	385-3L	Temperature Meter	2	43.00
51 A 9159	388-3L	Thermometer	6	80.00
51 A 9201	389-3L	Temperature Meter	6	75.00
51 A 9164	390	Volt-Amp-Wattmeter	4	65.00
51 A 9850	603	Strip Chart Recorder 0-50 Mic. DC	4	107.00
51 A 9851	603	Strip Ch't Recorder 0-100 Mic. DC	4	102.00
51 A 9852	603	Strip Ch't Recorder 0-250 Mic. DC	4	98.00
51 A 9853	603	Strip Chart Recorder 0-1 mA DC	4	90.00
51 A 9854	603	Strip Chart Recorder 0-15 V DC	4	97.00
51 A 9855	603	Strip Chart Recorder 0-150 V DC	4	96.00
51 A 9856	603	Strip Chart Recorder 0-5 V AC	4	102.00
51 A 9857	603	Strip Chart Recorder 0-150 V AC	4	102.00
51 A 9858	603	Strip Chart Recorder 0-300 V AC	4	104.00
51 A 9624 U	604	Volt-Amp-mA-µA Multicorder	6	200.00
51 A 9226	150	Amp-Clamp	1	30.30

SIMPSON SCOPE

Stock No.	Mfr's Type	Description	Wt., Lbs.	EA
51 A 9643 U	466	5" Handiscope	29	190

SIMPSON ACCESSORIES

Stock No.	Mfr's Type	Description	Wt., Lbs.	EA
51 A 5136	0010	15′ Thermistor Lead, 385-3L, 389-3L	½	
51 A 9150	0073	RF Probe for Model 303	1	1
51 A 9149	0074	High Voltage Probe for Model 303	1	1
51 A 9604	0152	RF Probe for Model 312	1	1
51 A 9213	0158	High Voltage Probe for Model 263	1	1
51 A 9626	0161	High Voltage Probe for Model 255	1	1
51 A 5289	0173	High Voltage Probe for Model 269	2	1
51 A 9158	0181	High Voltage Probe for Model 269	2	1
51 A 9160	0187	Surface Temperature Probe, 388-3L	1	1
51 A 9161	0190	General Purpose Probe	1	
51 A 5137	0216	30′ Thermistor Lead, 389-3L, 385-3L	1	
51 A 5138	0415	50′ Thermistor Lead, 389-3L, 385-3L	1½	1
51 A 5140	0417	150′ Thermistor Lead, 389-3L, 385-3L	4½	1
51 A 9625	0531	Clamp-on Adapter Model 255	1	3
51 A 9622	0549	Carrying Case	2	1
51 A 9621	0574	High Voltage Probe Case	1	
51 A 9606	0577	Case for Model 312	2	1
51 A 9862	0683	Special Gear Train Unit for 604	¼	3
51 A 9211	0731	High Frequency Probe, Model 311	1	1
51 A 9208	0732	High Voltage Probe, Model 311	1	1
51 A 5135	0789	Free-Air Temp. Probe, 385-3L	1	1
51 A 5141	0790	Surface Temperature Probe, 389-3L	1	
51 A 9863	02611	Ever-Redy Carrying Case for 604	1½	2
51 A 9605	0155	High Voltage Probe, Model 312	1	1
51 A 9593	2055	Probe Tip Test Lead, Model 160	1	
51 A 9595	2929	Carrying Case for Model 160	1	1
51 A 9225	4236	Carrying Case, 250, 260, 261, 270	2	1
51 A 9155	5262	Carrying Case, Models 262, 269	2	1
51 A 9157	6355	Leather Case for 355 VOM	½	
51 A 9198	8600	Extra Lead for 355 VOM	½	
51 A 9615	2612	Chart Paper for Model 604 (Box of 10 rolls)	2	1
51 A 9859	20196	Carrying Case for Model 603	2	2
51 A 9860	20195	Takeup Reel for Model 603	1	1
51 A 9861	20097	Chart Paper for Model 603 (Box of 6 Rolls)	1	1

*See page 438 For full Credit Det

World-famous Test Equipment

SIMPSON

Allied can supply the Test Instrument you need!

st equipment shown in this catalog is only a sampling of Allied's
tual stocks. We can ship, promptly, most models by Amprobe, B & K,
:o, Hathaway, Hickok, Jerrold, Precision Apparatus, RCA, Rustrak, Seco,
ncore, Simpson, Sprague, Triplett and others.

Jerrold Antenna Signal-Strength Meter

179⁵⁰
$9 monthly*

l AIM-718. Lightweight, compact signal-
gth meter reads directly in dB mV and µV
ow exact antenna requirements for best
llation. Covers 54-216 MHz for VHF-TV
FM, 470-890 MHz for UHF-TV. Has 75
300-ohm inputs (matching transformer
ied); two built-in 20 dB attenuators.
s to 200,000 µV and +40 dB with
uators. Accuracy: VHF, −3 dB; UHF,
B. Sensitivity: 20 µV at 75 ohms; 40 µV
0 ohms. 9x6½x4". With batteries, audio
it jack, crystal earphone.
9657. Shpg. wt., 4½ lbs. 179.50

Lectrotech 1½-V Supply

ces ohmmeter battery in most
M's. Takes just a few minutes to
it. Permanent source of 1½-VDC.
all VTVM's using negative
ded "D" cell for ohmmeter.
5634. Shpg. wt., 4 oz. 3.95

Metergard

Prevents bent Pointers; Pivots

Ends expensive meter repairs. Metergard wires across any meter rated 25 µA to 25 mA. Protects against 10,000% overload. Won't affect accuracy. Compact size.
51 A 5627. Shpg. wt., 4 oz. 2.95

Handy pocket-size VOM

53⁰⁰
$5 monthly*

Compact version of famous 260 VOM

Model 160 Handi-VOM. Has the same quality features of the famous 260 VOM, plus extended range coverage for accurate transistor work. Protected taut-band meter movement; recessed range selector switch; 1-volt plug-in jack. Reads VDC to 1000, VAC to 1000, DC current to 500 mA, ohms to 10K. Accuracy: AC, ±3%; DC, ±2%. 2¼x3⁵⁄₁₆x5⁵⁄₁₆". With test leads, batteries.
51 A 9591. Shpg. wt., 6 lbs. 53.00
51 A 9593. Probe-Tip Leads. 1 lb. ...3.00
51 A 9595. Carrying Case. 2 lbs. ..10.00

Amprobe extra-convenient Test Instruments for accurate readings of voltage and current

Multi-purpose Voltage Tester

Fits in shirt pocket

9⁵⁰

- Indicates Polarity
- 3-Ft. Test Probe

VT-100. Compact, easy-to-use mul-
pose voltage tester fits easily in
shirt pocket. Ideal for testing all
of circuits. Shows nominal voltage
op thermometer-type scale by a
of two windows corresponding to
voltage level: 115-220-277-440-550
115-220-400-600-750 VDC. On AC
rements, both windows light and
lible indication of frequency is given.
of signal increases with frequency
25 to 800 Hz. On DC measurements,
ne of the windows light, indicates
sitive side of the line. Sliding probe
s through body; retractable probe
ft. cord. 6x2¼x¾".
210. Wt., 8 oz. 9.50

Ⓐ "Amprobe Jr." Testers

Y Series. Voltage, current testers snap around conductors to ½" dia. Measure amps shown and 0-125-250 V, except* 0-150-600. With leads. Order carrying case below.

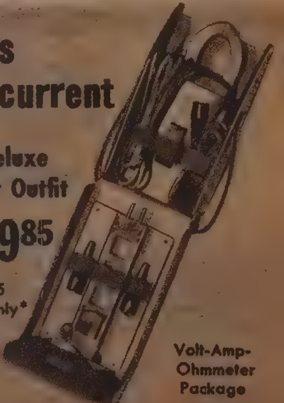
Stock No.	Type	Amps	EACH
51 A 9089	Y25	0-25	24.50
51 A 9167	Y525*	0-25	24.50
51 A 9168	Y550*	0-50	24.50
51 A 9169	Y500*	0-100	24.50

51 A 9105. Leather Case. 1 lb. ...3.25

Ⓑ Rotary scale Tester

Model RS-3. Single scale shows behind magnified window. Clamps around conductor to 1¹⁄₁₆" dia. for current; plugs in for voltage and ohms. To 600 VAC; 300 amps; 25 ohms mid-scale. Accuracy, ±3%. 7³⁄₃₂x2⅝x1¹¹⁄₃₂". Leads, case. 2 lbs.
51 A 9268. ....58.50

Deluxe Test Outfit



69⁸⁵
$5 monthly*

Volt-Amp-Ohmmeter Package

Model TM-63. Ideal for everyone who does electrical troubleshooting. Includes RS-3 Rotary-Scale Snap-Around Volt-Amp-Ohmmeter. Ranges: 0-150/300/600 VAC; 0-6/15/40/100/300 amps AC; 25 ohms mid-scale. ±3% accuracy. Pointer lock. Set of VLK-311 "Extendo-Leads" that eliminate the need for a "third hand"; A-45L Energizer for increasing the sensitivity of the RS-3 up to 5 or 10 times. Permits current readings on permanently-wired low-current equipment. Compact "A" leather carrying case has hinged cover, snap lock, handle. 11x8½x3". Shpg. wt., 3 lbs.
51 A 5209. ....69.85

Accurate easy-to-use Instruments by Triplet

Model 310 compact VOM

44^{00} $5 monthly*

Popular, compact VOM. Small, but no sacrifice in range, quality, or workmanship. Provision for attaching Model 10 clamp-on AC ammeter. Interchangeable test prod can be plugged into jack at top of VOM to make it the common probe and free one hand. Single function and range switch. Rugged spring-backed jeweled movement. Self-shielded for use in strong magnetic fields. Sensitivity, 20,000 ohms/V DC, 5000 ohms/V AC. Accuracy, ±3% DC, ±4% AC. Ranges: DC and AC volts, 0-3-12-60-300-1200; DC mA, 0-6-60-600; DC μA, 0-600; Resistance, 0-20K-200K ohms, 0-2-20 megs. Size, 4¼x2¾x1⅝". With batteries, leads, manual. 4 lbs.

51 A 9667........................44.00

Model 631 VTVM-VOM

11-meg VTVM input **82^{00}** $5 monthly*

VTVM and VOM at the price of a single tester. Single-switch selector for VTVM or VOM operation. Large easy-to-read 5½" meter with unbreakable face. Spring-backed jewels for ruggedness. Long-life battery operation. Accuracy: VOM, 3% DC, 4% AC; VTVM, 4%. Ranges: VTVM DC V, 0-1.2-6-30-120 (11 megs input imp.); VOM DC volts, 0-3-12-60-300-1200 (20,000 ohms/volt); AC and audio volts, 0-3-12-60-300-1200 (5000 ohms/volt); DC current, 0-60 μA, 0-1.2-12-120-1200 mA, 0-12 amps; dB, −20 to +63; Ohms, 0-1500-15K, 0-1.5-150 megs. 7½x5½x3$\frac{11}{32}$". With test leads, alligator clips, batteries, rubber feet, and detailed instruction manual. Shpg. wt., 4½ lbs.

51 A 9113........................82.00

Model 630 VOM

0.1 ohm to 100 megs **61^{00}** $5 monthly

Has the accuracy of some VOM
costing much more. 1% ultra-
curate resistors give ±2% acc
racy on DC; ±3% on AC. Usa
through 500 kHz. Single select
switch for all functions and rang
minimizes chance of an incorre
setting and possible burnout.
sistance can be accurately re
from .1 ohm to 100 megs. DC vo
meter sensitivity, 20,000 ohms/
AC, 5000 ohms/V. Ranges:
and AC volts, 0-3-12-60-300-120
6000; DC current, 0-60 μA, 0-1.
12-120 mA, 0-12 amps; Resi
ance, 0-1000-10,000 ohms, 0-1-
megs; Decibels, −20 to +70 (6
ohm line at 1 mW); Output vol
0-3-12-60-300-1200 (jack has
pacitor). 7½x5½x3$\frac{7}{32}$". Batteri
leads, manual. 6 lbs.

51 A 9118........................61.

Complete line of Triplett Test Equipment and Accessories

(As Triplett releases new test equipment, Allied will place it in stock)

Here is Triplett's entire line of VOM's and other test equipment, featuring high quality and accuracy. In Triplett's extensive line of VOM's you get large, easy-to-read red-printed scales; easy-to-operate single-switch function and range selector; more ohmmeter ranges to allow higher and lower readings; fuse protection in ohmmeter ranges to prevent damage to precision resistors; self-shielded Bar-Ring meter construction to protect movement against st
magnetic fields; spring-backed instrument jewels to g
additional ruggedness to meter movement; heavy-d
phenolic case to protect instrument against damage fr
rough handling. Feature-packed Triplett instruments
not only versatile, easy to operate, and accurate, but o
excellent value for your test equipment dollar.

TRIPLETT VOM'S

Stock No.	Mfr's Type	Description	Wt., Lbs.	EACH
51 A 5095	100	VOM and AC Ammeter Outfit	7	78.00
51 A 5096	310C	VOM	2	56.00
51 A 9121	630A-2	VOM	5	71.00
51 A 9690	630APL-3	VOM	5	71.00
51 A 9693	630APLK	Burnout-Proof VOM	5	105.00
51 A 9692	630L	VOM	5	66.00
51 A 9230 T	630M	Professional VOM	5	220.00
51 A 9110	630NA	Deluxe VOM	5	93.00
51 A 9691	630NS	200,000 Ohms/Volt VOM	5	110.00
51 A 9229	630PL	VOM	5	61.00
51 A 5299	630PLK-3	Burnout-Proof VOM	5	93.00
51 A 9114	666R	Pocket VOM	3	44.00
51 A 9071	800	Lab-Type VOM	7	110.00

OTHER TRIPLETT TEST EQUIPMENT

Stock No.	Mfr's Type	Description	Wt., Lbs.	EACH
51 A 9618	2590	Transistor Tester	6¾	71.00
51 A 9645 X	3414	Tube Tester	16½	132.00

TRIPLETT VTVM

Stock No.	Mfr's Type	Description	Wt., Lbs.	EA
51 A 9257	850	VTVM	7	93.

TRIPLETT ACCESSORIES

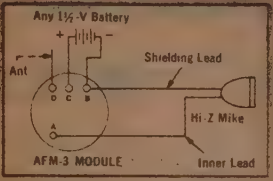
51 A 9231	10	AC Ammeter Adapter	1	20.
51 A 9232	101	Line Separator for Model 10	1	8.
51 A 9235	311	Lead for Model 10	½	3
51 A 9195	379	Leather Case for Model 10	3	8.
51 A 9256	611	Lead for Model 10	½	3.
51 A 9119	639-N	Black Cowhide Case for 630 Series	½	12.
51 A 9116	639-P	Black Cowhide Case for 630 Series	½	17.
51 A 5280	669-OS	Black Leather Case for 666R Series	½	9.
51 A 9111	T-2247-BV	CRT Adapter for Model 3414	1	9.
51 A 9120	T-255A35	Stand for 630 Series	½	2.
51 A 9112	T-79-70	Probe for 630, 630A, 631	½	17.
51 A 9215	T-79-71	Probe for 630, 630A, 631	½	17.
51 A 9258	T-79-83	Probe for 630PL, 630APL, 630L	½	17.
51 A 9259	T-79-130	Probe for 630PL, 630APL, 630L	½	17.
51 A 9260	T-79-145	Probe for 630, 630A, 631	½	9.
51 A 9193	T-79-196	Probe for 850	½	25.
51 A 9261	T-79 215	Probe for 850	½	9
51 A 9146	369	Leather Case for Model 310	½	4.

*See page 438 for full Credit deta

Allied solid-state Modules

AN AMAZING CONCEPT IN SPACE-AGE ELECTRONICS

e modules introduce you to today's l of *microminiature electronics* at a any hobbyist or experimenter can l. Each contains the solid-state circuit ich electronic devices as amplifier, inter- PA, more. Make connections to bat- switch, speaker or other accessories d below), and create many fascinating useful electronic devices. Modules are *anently encapsulated* in virtually in- uctible plastic nuggets. All are quality ructed to highest engineering stand- Av. shpg. wt., 6 oz.



All are 1⅓x1¼x1", except AMP-3, AFM-3, and TVM-1 are 2x1⅓x½"

Low as **2.98** Each

Intercom Amplifier

. For sensitive intercom. Use with ro C (or D), H, K, below.
9465 .... 2.98

Public Address Amplifier

3. Portable hi-gain system. Use A, C (or D), E, J, L, below.
9466 .... 2.98

Electronic Siren

3. Simulates wail of mechanical s. Use A, C (or D), E, F, below.
9469 .... 2.98

CB Microphone Preamp

3. Doubles mike output. Use E, elow, shielded cable, 1½-V batt.
9470 .... 2.98

Electronic Burglar Alarm

3. Hi-volume siren. Use with A, D), E and G, listed below.
9471 .... 2.98

AM Wireless Mike Transmitter

AWM-3. Transmit into your AM radio. Use with B and J, listed below.
24 A 9473 .... 2.98

FM Wireless Mike Transmitter

AFM-3. Transmit into your FM radio. Use with J, below, and 1½-V battery.
24 A 9474 .... 2.98

Shortwave Converter

CM-S. Tunes 25, 31, 41-mter bands (7-12 MHz). Use with B, below.
24 A 9462. Shpg. wt., 8 oz. 5.00

VHF Police, Fire Converter

CM-P. Receive police, fire calls using AM radio. 30-50 MHz. Use B and P.
24 A 9463. Shpg. wt., 6 oz. 5.00

VHF Aircraft Converter

CM-A. Receive aircraft using AM radio. Tunes 118-128 MHz. Use B, below.
24 A 9464. Shpg. wt., 6 oz. 5.00

TV Wireless Mike Transmitter

TVM-1. Transmit your voice to TV on channels 2, 3 or 4. Use with B, J, below, plus 100,000 ohm potentiometer.
24 A 9459. Shpg. wt., 2 oz. 5.00

Police, Weather Converter

CM-H. Receive 150-164 MHz police, fire, emergency, marine, weather transmissions on FM radio. Use B, K, below.
24 A 9461. Shpg. wt., 8 oz. 5.00

Metal Locator

DL-1. With AM radio detects and locates metal objects. Use B, K, below.
24 A 9460. Shpg. wt., 1 oz. 5.00

Signal Injector

SI-7. Generates 2 kHz audio-frequency signal with modulated radio frequency harmonics to 30 MHz. Use B, below.
24 A 9476. Shpg. wt., 1 oz. 2.98

Midland solid-state Modules for the hobbyist

0 Phono Preamp. Amplifies mag- type cartridges 0.5 V to 1.0 V A curve characteristic. Flat re- e. Use 9-12 VDC supply. Japan.
9490. Shpg. wt., 6 oz. 2.49

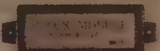
1 Tape Preamp. Can amplify tape up to 0.5 V to 1.0 V. NARTB characteristic. Flat response. as pre-amp for hi-fi amplifier with tape deck. Japan.
9491. Shpg. wt., 6 oz. 2.49

3 Power Amplifier. Can produce 300 mW when combined with 0, or 14-641 (above). Use with 16-ohm speaker. Japan.
9492. Shpg. wt., 6 oz. 2.98

14-644 FM Transmitter Module. Transmit on 88 to 108 MHz through FM receiver up to 50 yards away. Use with 14-640 or 14-641. Japan.
24 A 9493. Shpg. wt., 6 oz. 2.98

14-646 Electronic Organ Module. Tone oscillator specifically designed for use with electric organs. Can be adjusted to raise key pitch as much as 2½ octaves. Japan.
24 A 9494. Shpg. wt., 6 oz. 1.98

14-648 Wireless Code Oscillator. Transistorized. For code practice. Use with N, below, and any PM speaker, 3 to 9-V battery. Japan.
24 A 9495. Shpg. wt., 6 oz. 1.98



Each: 2½x1¼x⅞"

FREE

Mounting Board is included with each Midland Module

Dual Flasher Module. Electronic switch for alternately flashing 2 miniature bulbs. Use with 6-V, 100 or 200 mA bulb. For warning lights; model cars, railroads; attention getters. Japan.
24 A 9489. Shpg. wt., 6 oz. 1.98

Selected Accessories for use with Modules

Type 510S 6-Volt Lantern Battery. For modules above.
A 5085. Shpg. wt., 1½ lbs. .. 99¢

Allied 9-Volt Battery. For modules above. 6 oz.
A 5980 .... Pkg. of 2 for 59¢

8" Round Speaker, 8 Ohms. Ideal for use with modules requiring efficient quality PM speaker. elivers clear response.
A 9530. Wt., 1½ lbs. 2.49

4" Square Speaker, 8 Ohms. For use with low-output modules. ompact but efficient.
A 9533. Wt., 12 oz. .... 79¢

E **Type GF323 SPST Slide Switch.** Use as on-off with modules.
56 A 5023. Shpg. wt., 3 oz. ..... 50¢

F **Type 188 Pushbutton Switch.** Momentary-contact SPST switch for use with Siren module.
56 A 4890. Wt., 2 oz. .... 46¢

G **Type BRD2-5L-IS Interlock Switch.** Flat base, solder terminals.
56 A 3971. Wt., 4 oz. 2.00

H **Type GF342 4PDT Switch.** 4PDT slide switch for use with Intercom module. Has solder-lug terminals. Shpg. wt., 3 oz.
56 A 5036 .... 1.00

J **Crystal Lapel Mike.** High-impedance mike. Response: 60-5000 Hz, –50 dB output. From Japan.
24 A 9881. Shpg. wt., 4 oz. ..... 98¢

K **Type U-12 5000-Ohm Control.** Volume control.
46 A 3751. Wt., 3 oz. 1.02

L **Type U-53 1-Megohm Control.**
46 A 3776. Wt., 3 oz. 1.02

M **Type U-48 ½-Megohm Control.**
46 A 3773. Wt., 3 oz. 1.02

N **Telegraph Key.** Fully adjustable.
17 A 6656. Wt., 2 lbs. 2.50

P **Metal Box.** Gray. 4x2⅛x1⅝".
24 A 9688. Wt., 4 oz. .... 71¢

Resistors and Capacitors at bargain prices

Carbon Resistor Assortments at special savings

Low as **1.98** Stock up now at low prices!

½ Watt. ±10% tolerance. Two each: 3.9, 10, 12, 15, 22, 27, 39, 82, 120, 150, 180, 270, 390, 470, 560, 680, 820, 1200, 1800, 2700, 3300, 3900, 5600, 6800, 8200, 12K, 18K, 22K, 27K, 33K, 39K, 68K, 82K, 100K, 120K, 150K, 330K, 390K, 470K, 680K, 820K ohms; 1, 1.5, 1.8, 2.2 3.3, 5.6, 6.8, 8.2, 10 megs.
24 A 9660. Wt., 5 oz.......**100 for 2.98**

¼, ½, 1, 2 Watt. 25 ¼-watt, 100 ½-watt, 25 1-watt, 50 2-watt. ±5% and ±10%. Color coded.
24 A 9285. 10 oz.........**200 for 3.49**

½, 1, 2 Watt. 40 ½-watt, 30 1-watt, 30 2-watt. ±5%, ±10%.
24 A 9329. 5 oz..........**100 for 1.98**

½ Watt. 100 popular values. ±10%. Color coded.
24 A 9699 R. 5 oz........**100 for 1.98**

½ Watt. 100 popular values. ±5% and ±10%. Color coded.
24 A 9717. 5 oz..........**100 for 2.49**

¼ Watt. 150 popular values. ±10%.
24 A 9718. 1 lb..........**150 for 2.98**

½ Watt. 200 popular values. ±5% and ±10%. Color coded.
24 A 9719. 10 oz.........**200 for 3.98**

½ Watt. Two each: 10, 12, 15, 18, 22, 27, 33, 39, 47, 56, 68, 82, 100, 120, 150, 180, 220, 270, 330, 390, 470, 560, 680, 820, 1000, 1200, 1500, 1800, 2200, 2700, 3300, 3900, 4700, 5600, 6800, 8200, 10K, 12K, 15K, 18K, 22K, 27K, 33K, 39K, 47K, 56K, 68K, 82K, 100K, 120K, 150K, 180K, 220K, 270K, 330K, 390K, 470K, 560K, 680K, 820K; 1-15 megohms. Shpg. wt., 10 oz.
24 A 9377...............**150 for 3.95**

RF and Audio Power Transistor Assortments

2

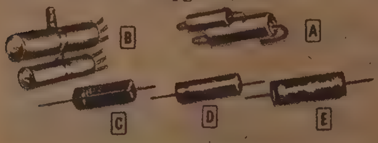
Ideal for experimenters. 25 assort
audio transistors: 4 TO-3 PN
germanium, 15 watts; 4 TO-3 NP
silicon mesa, 15 watts; 2 TO-
PNP germanium, 10 watts; 4 TO
PNP germanium DAP, 2 wat
4 TO-9 PNP germanium 0.4 wa
2 TO-18 NPN silicon 0.2 watt;
TO-24 PNP germanium MAD
0.2 watt.
24 A 9517. Wt., 6 oz....**25 for 2.**

Selection of 25 RF and AF tra
sistors: 5 TO-3 PNP germaniu
AF, 15 watts; 5 TO-3 NPN silic
mesa AF, 15 watts; 3 TO-5 PN
germanium AF, 3 watts; 5 TO
PNP germanium RF, 1 MHz;
TO-3 NPN silicon mesa RF,
MHz; 2 TO-5 PNP germanium R
2 MHz.
24 A 9518. Wt., 12 oz...**25 for 2.**

Bargains in Power Resistors of assorted values and wattages

50 for 2.98 Unbeatable value in a package of 50 power resistors with axial leads. Assortment includes popular values in 3 to 30 watt ratings. ±10% tolerance.
24 A 9723. Shpg. wt., 10 oz....**50 for 2.98**

25 for 98¢ A great bargain! Twenty-five wirewoun
axial-lead power resistors, each a differe
value, in wattage ratings from 3 to
watts. Ceramic case. ±10% tolerance.
24 A 9960. Shpg. wt., 6 oz......**25 for 9**



Capacitor Bargains

Standard Brands, Popular Values

A **Single-Section Electrolytics.** Aluminum cans. 3" axial leads. 4 oz.

Stock No.	µF	WVDC	EACH
24 A 9988	150	150	.75
24 A 9989	200	200	.98
24 A 9990	20	450	.49
24 A 9991	40	450	.59
24 A 9992	80	450	.89

B **Multisection Capacitors.** Wax filled. Tinned leads. Mounting strap. 4 oz.

Stock No.	µF	WVDC	Size	EACH
24 A 9993	50-30	150	2⅝x1"	.45
24 A 9994	50-30-20	150	2⅝x⅞"	.69
24 A 9995	80-40	150	2⅝x1"	.79

C **Plastic Molded and Ceramic Capacitors.** Less than 4¢ each! Selection of popular values for every need, in voltages from 50 to 6000 volts. 10 oz.
24 A 9962..................**Pkg. of 25 for 98¢**

D **Tubular Capacitors.** Wax impregnated. U.S.-made standard brands. 100 to 1000 WVDC. Axial leads. 12 oz.
24 A 9584..................**Pkg. of 40 for 98¢**

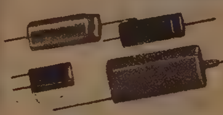
E **Ceramic Tubulars.** Values from 1 µF to 3000 µF. Most are NPO and N750 temperature coefficient types. 3 oz.
24 A 9357..................**Pkg. of 100 for 98¢**

Disc Ceramics by famous manufacturers

48 for 98¢

Values in high-quality disc ceramic c
pacitors. Made by famous manufacture
to their rigid standards. Generous 4
piece assortment includes values from
pF to 1000 pF at 50 to 5,000 VDC. A
have parallel wire leads. All are man
factured in America.
24 A 9958. Shpg. wt., 8 oz......**48 for 9**

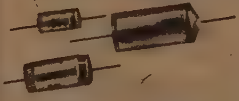
Assortment of 40 Miniature Electrolytics



40 for 3.95

Assortment of miniature electrolytics
handy plastic storage case. These
high-quality capacitors made to exacti
specifications for printed circuit use. Fi
each: 2 µF, 25 WVDC; 10 µF, 15 µF a
WVDC; 2 µF, 10 µF at 25 WVDC; 10
20 µF at 50 WVDC; 90 µF, 3 WVDC.
24 A 9289. Shpg. wt., 8 oz......**40 for 3.**

Assortment of 100 polystyrene-film Capacitors



100 for 2.98

Bargain in specially selected assortme
containing 5 each of 20 values from 20
to 6800 pF, 160 to 630 volts. 5% a
10% tolerances. These quality capacit
have a leakage resistance greater th
100,000 megs. Outlast and outperfo
foil, mylar, and mica capacitors.
24 A 9721. Shpg. wt., 3 oz....**100 for 2.**

Bargains in solid-state Circuit Components

ssortments
. . all in
lastic Cases

opular Values

Ideal assortments for experimenter, hobbyist, and serviceman.

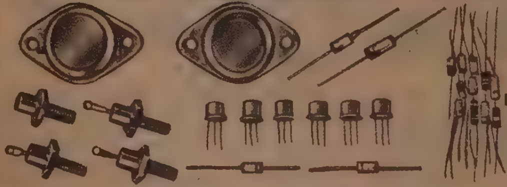
ature Electrolytics. For solid-state cir-
Five each: 10 μF, 16 WVDC; 20 μF,
VVDC; 30 μF, 6 WVDC; 50, 100 μF.
VDC. Five each of two other values.
9265. Wt., 8 oz. . . . . **40 for 3.95**

/att Resistor Assortment. (Not illus.)
t each: 1000, 47K, 100K, 270K, 1
; seven each: 4700, 10K, 220K, 2.12
; five each: 3300, 22K, 27K, 33K,
K, 4.7 meg; four each: 100, 470, 1500,
, 2700, 56K, 68K, 313 meg; three
: 47, 220, 270, 10 meg.
9190. Wt., 4½ lbs. . . . . . . **150 for 5.98**

ece Capacitor Assortment. (Not illus.)
mic or molded. Fifteen: .01; twelve:
eight: .005, .02, .1; five: .001, .002,
two: .0047, .03, .25 μF.
9196. Wt., 2 lbs. . . . . **72 for 5.98**

'iece Ceramic Disc Assortment. Short-
ceramic discs for printed circuit
ds. Capacitance ranges from 2.2 pF
1 μF. 500 WVDC. (Not illus.)
9722. Wt., 1 lb. . . . . **100 for 2.98**

Money-saving Semiconductor Assortments



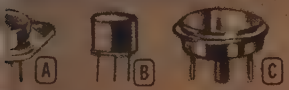
Low as 1^{98}

38-Piece Assortment. Carefully selected for the experimenter, hobbyist, and technician. Contains a wide variety of semiconductors in popular types. Includes 4 PNP transistors, 4 NPN transistors, 2 power transistors (in TO-3 case), 4 silicon rectifiers (rated 2 amps), 20 germanium diodes, and 4 zener diodes (rated ¾ watt). Save time and trouble—keep a stock of these items conveniently on hand. And save money, too—stock up now while prices are this low.
24 A 9477. 4 oz. . . . . **38 for 1.98**

100-Piece Assortment. 2 TO-3 PNP germanium AF, 15 watts; 2 TO-3 NPN silicon mesa, 15 watts; 2 TO-3 PNP germanium, 15 watts; 4 TO-9 PNP germanium, 0.4 watt; 4 TO-5 NPN germanium, 0.4 watt; 15 TO-24 PNP germanium MADT, 0.2 watt; 2 TO-5 PNP germanium DAP, 2 W; 5 DO-7 germanium, 0.2 W; 2 TO-18 SCR; 22 DO-7 germanium, 0.2 W; 27 DO-7 silicon, 0.4 W; 4 DO-4 silicon; 4 silicon zeners, 0.75 W; 5 DO-7 silicon zeners, 0.4 W.
24 A 9514. 1 lb. . . . . **100 for 5.49**

60-Piece Assortment. 15 MADT high-frequency transistors, 50 MHz; 5 zener diodes, 400 mW (assorted voltages); 2 TO-5 PNP germanium, 3 amp; 5 IN82A germanium diodes; 2 SCR, 0.2 amp (low voltage); 2 TO-3 NPN silicon mesa power; 2 TO-3 PNP germanium power; 27 SCR, 400 mW (more than 25 PIV).
24 A 9513. Shpg. wt., 8 oz. **2.98**

Values in Transistors



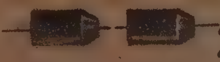
79¢ 4 for 88¢ Each 87¢

dio Power Transistors. 2N176 for
dio power amplifiers. Rated 3
at 30 VDC. Beta, 25V; I_{CBO},
; Gain; 33.5 dB. For 6, 12, 28-
circuits.
9633. 4 oz. . . . . . **Pkg. of 2 for 79¢**

'N Transistors. Check this bargain.
our NPN Transistors for less than
ach. Equivalents of 2N168, 2N-
and 2N170. BV_{CBO}, 15 V; BV-
0 V; I_C peak, 400 mA.
9643. 4 oz. . . . . . **Pkg. of 4 for 88¢**

-Watt PNP Transistor. A special
lied bargain. It's a germanium-
junction type. Rated 15 A at
olts. Replaces Delco Type 501,
ix 2N278 and 2N173, etc.
9634. Shpg. wt., 3 oz. . . . **Each 87¢**

Epoxy Silicon Rectifiers



Low as 2 for 59¢

Top-quality, ideal for application in all types of hi-fi, radio, and TV power supplies. All have 750-mA output. 1½" axial leads, epoxy construction. Pkg. of 2. Shpg. wt., 3 oz.

24 A 9692. PIV 200	**2 for 59¢**
24 A 9669. PIV 400	**2 for 77¢**
24 A 9693. PIV 600	**2 for 99¢**
24 A 9572. PIV 800	**2 for 98¢**
24 A 9573. PIV 1000	**2 for 1.39**

Famous-brand Zener Diodes

2 for 88¢

Each has a 1 to 2-watt power rating. All have axial leads. ±10% tolerance. Pkg. of 2. Shpg. wt., 2 oz.

24 A 9358. 3.9 V	**2 for 88¢**
24 A 9359. 6.8 V	**2 for 88¢**
24 A 9361. 12 V	**2 for 88¢**
24 A 9362. 18 V	**2 for 88¢**
24 A 9363. 33 V	**2 for 88¢**

24 A 9340. Assortment of 12. 250-mm to stud-mount. 1 W 2.7 to 33 V. 4 oz. 1.98

25-pc. Rectifier Assortment

25 for 2^{98}

All are case cathode type (except *case anode type) with axial leads. Rated more than 50 PIV. Assortment contains 7 DO-12, 0.5 amp; 3 DO-1, 0.75 amp; 3 DO-1*, 0.75 amp; 6 A-31, 1 amp; 6 A-31, 1.5 amps.
24 A 9516. Wt., 8 oz. . . . . . **25 for 2.98**

25-pc. Transistor Assortment

25 for 2^{98}

3 TO-3 PNP Ge AF; 3 TO-3 PNP Ge RF; 3 TO-3 NPN silicon mesa AF; 3 TO-3 NPN silicon mesa RF; 2 TO-5 PNP Ge AF; 6 TO-24 PNP Ge MADT RF; 3 TO-9 PNP Ge AF; 2 TO-18 silicon NPN AF.
24 A 9515. Wt., 8 oz. . . . . . . **25 for 2.98**

Heat-Sink Assortment

t value in 12-pc. heat sink assort-
. Contains eight 10-fin heat sinks
EDEC TO-5 transistor cases and
to fit JEDEC TO-18. Stock up
at this low price.
9367. Wt., 4 oz. . . . . . **12 for 1.98**

12 for 1^{98}

Integrated Circuit

Fairchild NJS716 medium-power, low-distortion audio amplifier integrated circuit. Has gains to 10, 20, 100, 200. IC contains 11 transistors, 6 diodes, 18 resistors. Booklet, instructions.
24 A 9268. Shpg. wt., 1 oz. **5.95**

5^{95}

Stock up now on bargain counter specials

5-lb. Hardware Assortment

98¢

For home hobby enthusiasts. Nuts, bolts, screws, eyelets, rivets, clamps, springs, grommets, washers, wood and sheet metal screws.
24 A 9724.....5 lbs. for 98¢

Terminal Strips

100 for 98¢

Assorted bakelite strips with 1 to 6 terminals each. ⅜" wide. Many electronic applications. For hobbyist or shop. Shpg. wt., 12 oz.
24 A 9582.....Pkg. 100/98¢

Assorted Slide Switches

12 for 98¢

You get SPST, SPDT, DPST, DPDT slide switches —under 9¢ each. Rated ½ to 3 amps, 125V. U.L. listed. Shpg. wt., 9 oz.
24 A 9865......Pkg. 12/98¢

Volume Control Assortment

10 for 98¢

Ideal for experimenters
servicemen. You get: 5
ohm, 2500 ohm, 10
500K, 1 meg, plus 5 ot
values. Shpg. wt., 8 oz.
24 A 9314......Pkg. 10/

Chassis Kit

3⁷⁵

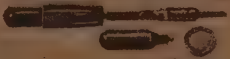
Aluminum frame expands, stacks, couples. Phenolic mounting board, panel rails. With breadboard. 2x4x7". 50 solderless terminals.
24 A 9210. Wt., 10 oz...3.75

Soldering Gun

1⁷⁹

30-watt gun has 3" copper tip, 3' cord. 10" long. 110 VAC. U.L. Listed. Japan.
24 A 9847. 2 lbs........1.79
24 A 9316. Dual Pack Solder. 5' ea. 4 oz.......Pkg. 2/79¢

Pocket Blowtorch Kit



Holds ½-hour butane gas fuel supply

3⁷⁵

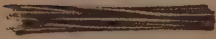
Solder or braze at 3500° with pinpoint flame. Uses butane gas cartridges.
24 A 9263. Wt., 10 oz...3.75
24 A 9264. Extra Cartridges. 6 oz.........Pkg. of 4/1.09

Phone Plug Value

4 for 98¢

Completely shielded ph
plugs have easily remov
handle to assure accessa
ity when soldering.
handle. Wt., 5 oz.
24 A 9512....Pkg. of 4/

50-ft. Spaghetti Assortment



Twenty 30" lengths

79¢

Assortment of completely insulated sleeving includes twenty 30" lengths. In various diameters, colors, and finishes. Wt., 8 oz.
24 A 9018.............79¢

Wire Assortment

Five 100-ft. coils coated hookup wire

5 for 3⁹⁸

Five 100-ft. coils assorted wire. Stranded and solid conductors. Vinyl coated to resist abrasion and corrosion. In five colors. 2¼ lbs.
24 A 9384. Five coils....3.98

UHF-VHF Twin Line

Moisture resistant polyethylene

50 ft. for 98¢

Foam-filled tubular 300-ohm all-channel TV-FM twin line in 50-ft. coil. Moisture resistant. Black polyethylene. 1½ lbs.
24 A 9501.....50-ft. for 98¢

Heat Shrinkable Tubin

10 Pcs. 98¢

Assorted sizes. For insul
ing tools, etc. Shrinks
135° C. in oven or ot
heat source. Polyolefin.
from $\frac{1}{32}$-1". 2 oz.
24 A 9007..Pkg. of 10/

Assorted molded plastic radio Knobs

Fluted or grooved

98¢

In assorted colors. Fluted or grooved type knobs fit many dials. 1½ lbs.
24 A 9287...Pkg. of 50/98¢
24 A 9282. TV Knobs. For most makes. Pkg. of 50/1.98

Assorted Switches

12 for 98¢

Excellent for the experimenter. Push-to-talk (4P-DT), momentary contact (SPST); slide (5 ea. SPST, 3 ea. SPDT); 2 others.
24 A 9502. 10 oz. Pkg. 12/98¢

Stereo/Mono Pickup Arms

With Cartridge

Mono 1⁶⁴

Has turnover cartridge with two synthetic sapphire needles. For manual phonos. From Japan. Wt., 8 oz.
24 A 9580. Stereo.......1.94
24 A 9579. Monophonic..1.64

2-cond. Phone Jacks

Accept standard ¼" plug

5 for 9

Great buy! Especially
Ham enthusiasts. Open
cuit 2-conductor jacks
cept standard ¼" pl
smoothly. Shpg. wt., 6
24 A 9227.....Pkg. of 5

Alligator Clips

4 for 39¢

For adapting banana plug to clips, or accepting wires. Screw terminals. ⅜" steel. Shpg. wt., 3 oz.
24 A 9266. Red........4/39¢
24 A 9267. Black......4/39¢

Cable-Plug Kit

6-pc. Set 1⁹⁸

72" shielded cable, 2 phono plug; 9" cable, phono plug, 2 alligator clips; 2 couplers; 1 adapter, and case. Japan. Shpg. wt., 8 oz.
24 A 9877..............1.98

Shielded Audio Cables

2 for 67¢

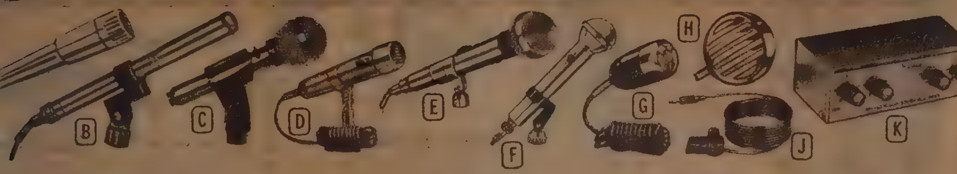
Audio cables with pin plugs on both ends. Japan. Shpg. wt., 8 oz.
24 A 9608. 18" Cable. 2/67¢
24 A 9609. 36" Cable. 2/84¢
24 A 9870. 72" Cable. 2/98¢

Phone Plugs

4 for 98¢

Nickel-plated brass
are complete with
terminals. Plugs meas
2⅞" long, ¼" dia. 12
24 A 9225. Black......4/
24 A 9226. Red........4/

g values in low-priced Mikes and Speakers



Microphones for every purpose . . . all at low prices

ynamic Mike. Features wide 175°
ickup pattern; 50-14,000 Hz re-
se. Dual impedance, 600 ohms or
. 20-ft. shielded cable. Less stand.
n Japan. Shpg. wt., 3 lbs.
9348........................9.95

lim Dynamic Mike. Dynamic car-
ioid mike is perfect for pickup of
or music. Response, 40-18,000
Impedance, 50,000 ohms. Slim
lia. x 6⅝". 10-ft. cable, standard
ter. Japan. Wt., 8 oz.
9001........................8.95

eluxe Dynamic Mike. Cardioid mike
r stage, recording or PA use.
built-in volume control with on-
switch, 20-ft. detachable cable.
-mesh screen. 100-10,000 Hz;
and 600-ohms.
9505. Japan. Wt., 12 oz....17.98

D Slim Crystal Mike. Trim slim-line styling makes mike ideal choice for hand use Hi-Z. Has handy on-off switch. Response, 100-9000 Hz. With standard 6-ft. cable. From Japan. Shpg. wt., 8 oz.
24 A 9587........................2.95

E Cardioid Dynamic Mike. Professional-quality mike is a real performer for indoor or outdoor use. Sphere-top. Dual impedance, 150-250 ohms or hi-Z. 100-10,000 Hz. On-off switch, 20-ft. cable. From Japan.
24 A 9222. Shpg. wt., 1½ lbs...14.95

F Dynamic Ball-Type Mike. Features omnidirectional pattern and "pop-proof" grille. 100-12,000 Hz. Hi-Z. With 20-ft. cable, swivel adapter. From Japan. Shpg. wt., 1 lb.
24 A 9023........................8.95

G Crystal Mini-Mike. Only 2¼" long, 1" diameter. Response, 100-10,000 Hz. Hi-Z. For recording, general purpose use. With 5-ft. shielded cable. From Japan. Shpg. wt., 6 oz.
24 A 9589........................2.49

H Crystal Lapel Mike. Clips to pocket. For recording, interviews, etc. Response, 60-5000 Hz. Hi-Z. Japan.
24 A 9881. Shpg. wt., 6 oz..........98¢

J Guitar Contact Mike. For amplifying string instruments. Hi-Z. Includes volume control. 8-ft. cable.
24 A 9002. Japan. Wt., 8 oz......1.88

K Solid-state Mike Mixer. Mixes 4 signals to single output. 2-conductor phone inputs and phone-jack output. 6-dB gain. Size, 2⅜x6x3½". Includes battery. From Japan. Wt., 4 lbs.
24 A 9352........................6.95

Ideal as extension speaker 7^{88}

elf-speaker System

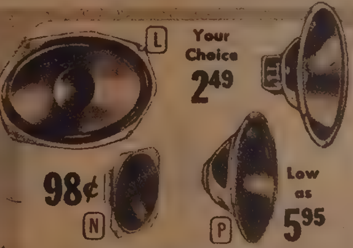
act-design enclosure has
c wood-grained oiled wal-
finish. Ideal for use as
sion speaker or in low-cost
nusic systems. 6x4" speak-
ith 1 oz. magnet. Power
ity, 5 watts. Impedance,
ns. With 20-ft. cable. 6x
". Wt., 3 lbs.
012........................7.88

Wall Baffles

Low as 2^{49}

Mounting Baffles. Washable
. Less speaker. Handsome
s for use anywhere.
253 X. For 12-inch speak-
hpg. wt., 5 lbs.......5.69
254 X. For 8-inch speakers.
wt., 4 lbs...........3.49
255 X. For 4 to 5-inch
ers. Wt., 1½ lbs.....2.49

ker-Baffles. Handsome
mounting baffles with
ers. Use for extension
ers. 35-11,000 Hz. 10
. 8 ohms. Wt., 5¼ lbs.
354 X. 12-inch.......8.95
355. 8-inch..........6.65



Replacement Speakers

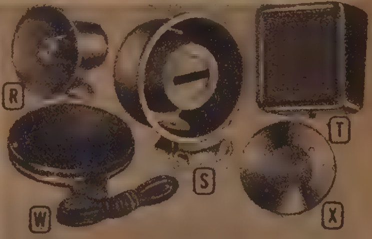
L 6x9" Oval Speaker. Has efficient 1.47-oz. Alnico V magnet. Whizzer cone to extend high-frequency response. 8 watts. 8 ohms.
24 A 9529. Shpg. wt., 1¼ lbs.....2.49

M 8" Round Speaker. Features whizzer cone, 1.47-oz. Alnico V magnet. Capacity, 8 watts. 8 ohms.
24 A 9530. Shpg. wt., 1½ lbs.....2.49

N 4" Square Speaker. Precision centered. Has .50 oz. Alnico V magnet. EIA dimensions. 8 watts. 8 ohms.
24 A 9932. Shpg. wt., 8 oz.........98¢

P Dual-Cone Speakers. 1½" voice coil. Whizzer cone. Internal dust cap.
24 A 9632. 8". 40-16,000 Hz. 20 W. 8 ohms. 4" deep. Wt., 3 lbs........5.95
24 A 9631 X. 12". 35-15,000 Hz. 25 W. 8 ohms. 5½" deep. 3½ lbs....6.95
24 A 9630 X. 15". 30-14,000 Hz. 30 W. 8 ohms. 6⅛" deep. 9 lbs..........9.95

Sound reproducer turns any surface—walls, doors, etc.—into sounding board. Connect speaker outputs to reproducer; then mount on desired surface. Size, 2x2x2".
24 A 9224. Shpg. wt., 8 oz........8.95



Indoor and Outdoor Speakers

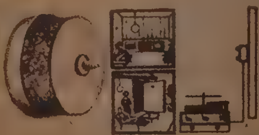
R Weatherproof 5¾" Trumpet Speaker. 300-12,000 Hz. 5 W. 8 ohms.
24 A 9483. Shpg. wt., 2 lbs..........8.49

S 5" Paging Speaker. Weatherproof horn-type. 180° swivel mount. 400-7000 Hz. 5 W. 8 ohms. With 24' hookup wire.
24 A 9843. Japan. Wt., 2 lbs.........7.95

T 8" Outdoor Speaker. Weatherproof baffle. Volume control. 40-15,000 Hz. 20 watts. 8 ohms. 10⅞x10⅞x5⅜".
24 A 9732 X. Shpg. wt., 6¼ lbs......9.95
24 A 9733. Similar to above, 4" speaker. 4$\frac{1}{16}$x5$\frac{1}{16}$x2⅜". 1¼ lbs...............4.95

W Pillow Speaker. 8 ohms. 2¼x⅝".
24 A 9525. Shpg. wt., 8 oz.........1.79

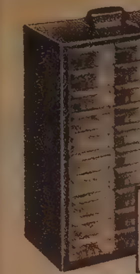
X Ceiling Speaker-Baffle. 8" speaker. 15 W. 8 ohms. With mounting hardware.
24 A 9520. Shpg. wt., 1½ lbs.........4.98
24 A 9521. **Brushed Aluminum Baffle Alone.** Above, less speaker. 12 oz............2.49



Sound Reproducer

Attaches to walls 8^{95}

Special Bargain Values

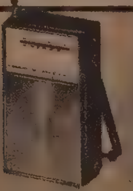


Low as 4^{31}

30-drawer Cabinet

Versatile cabinet has ample room for small parts and components. Rigid welded steel frame with enamel finish. "See-Thru" non-spill plastic drawers for easy identification of items. Each drawer, $1\frac{1}{4}$x$2\frac{3}{4}$x$5\frac{3}{4}$" deep. Plastic dividers, labels. Convenient carrying handle. Size, $9\frac{3}{4}$x17x$6\frac{5}{16}$".
24 A 9028 X. 9 lbs....5.49

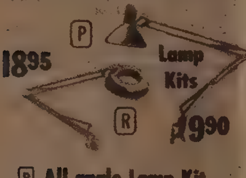
26 A 1739 X. 18-Drawer Cabinet. Above, drawers, $2\frac{3}{4}$x$5\frac{3}{4}$x$4\frac{1}{4}$". Overall, 9x10". $5\frac{1}{2}$ lbs...........4.31



FM-AM Portable Radio

11^{88}

Sensational low price for a quality FM-AM radio! Has AFC circuit for drift-free FM reception. FM-AM selector switch; telescoping antenna for local reception. Plastic case, 5x3x$1\frac{3}{4}$". With earphone, battery. Imported.
10 A 4225 S. 1 lb....11.88

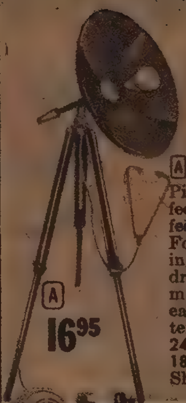


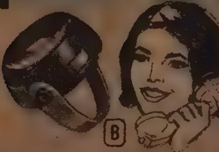
P All-angle Lamp Kit

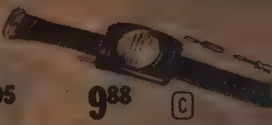
Assembles easily and quickly with just a screwdriver and pliers. Spring-loaded swivel joints; screw clamp. Gray. Less bulb. For 110-120 VAC.
24 A 9335 X. 5 lbs....9.90

R Magnifier Lamp Kit

Same fine features as above, but takes fluorescent tube and has 5" magnifying lens. Tube below.
24 A 9338 X. 7 lbs....18.95
Fluorescent Tube. For above.
24 A 9930. 8 oz.........2.99







A "Big Ear" Parabolic Mike

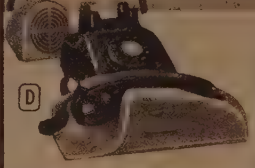
Picks up whispers at 50 feet, conversations at 150 feet, bird calls at 200 feet. For home security, hunting, keeping track of children. Tripod, 18" reflector, microphone, stethoscope, earphones. Takes one battery (order below).
24 A 9024 X. 5 lbs.....16.95
18 A 5980. 9-Volt Battery. Shpg. wt., 6oz. Pkg. of 2 for 59¢

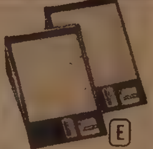
B Saxton Astro-Com Phone Amplif

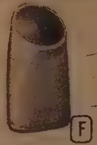
Attaches instantly and securely to a phone. Solid-state circuit. Volu control. Takes 1 battery, order belo
24 A 9687. Shpg. wt., 4 oz........7.
18 A 5082. Battery. 1 oz.......6 for 5

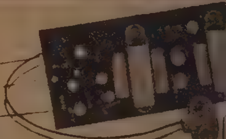
C Wrist FM Transmitter

Astro-Com X100. Broadcasts to a standard FM radio up to 100 feet aw Tunable 85-91 MHz. Battery below
24 A 9299 S. Shpg. wt., 2 oz......9.
18 A 5345. Battery. 3 oz......6 for 1.







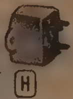


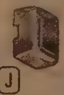
D Telephone Amplifier. Solid-state. Boosts telephone sound to room level. Great for conference calls. 10x3x3". 9V battery.
24 A 9231. Japan. Wt., $1\frac{1}{2}$ lbs.......14.95

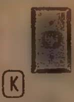
E 2-Station Intercom System. Remote can signal master. Volume control; talk button. 5x4x2". With battery, 66-ft. cable.
24 A 9957. Japan. Wt., 3 lbs..........9.95

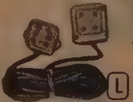
F Message Recorder. Records up to 30-s ond messages on continuous tape. cord/playback switch. Battery. 6x3x2"
24 A 9032. Shpg. wt., $1\frac{1}{2}$ lbs.........12

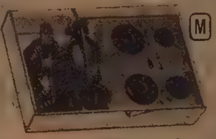
G Miniature Audio Amplifier. 1 watt, transistors. Uses 9V battery. Japan.
24 A 9207. Shpg. wt., 12 oz...........5
24 A 9209. Above, 3-watt output........6

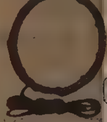












H Four-Prong Ivory Telephone Plug. Japan.
24 A 9365. Shpg. wt., 4 oz...........59¢

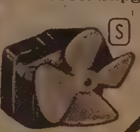
J Wall-Mounting Jack. For plug above.
24 A 9366. Japan. Wt., 4 oz..........59¢

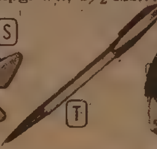
K Wall Plate. For plug and jack above.
24 A 9389. Japan. Wt., 4 oz.........1.79

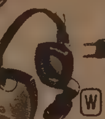
L 30-ft. Phone Cable. Telephone jack on one end, plug on other. From Japan.
24 A 9368. Shpg. wt., $1\frac{1}{2}$ lbs...........2.49

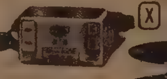
M Tube Continuity Checker. Checks tub appliances, fuses, coils. 115 VAC.
24 A 9305. Shpg. wt., 1 lb..............

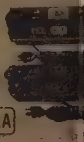
N Degaussing Coil. Demagnetizes pict tube and chassis to remove color impurities. 7" coil. 115 VAC.
24 A 9386. Shpg. wt., 12 oz.............











S Tube Fan. Cools vacuum tubes for longer life and better performance. Has 3200-rpm quiet-running shaded-pole motor. Four-blade fan. 115 VAC.
24 A 9457. $1\frac{1}{2}$ lbs......4.49

T Nylon Tip Markers. Easy to use thin-line markers with water soluble ink. Assorted colors or black only. Shpg. wt., 12 oz.
24 A 9273. Ass't.....12/2.89
24 A 9274. Black....12/2.89

W Stereo Headphones. Response to 15,000 Hz. $2\frac{1}{2}$" dynamic reproducers. Adjustable vinyl covered headband. 8 ohms. 6-ft. cord, plug. Japan.
24 A 9369. 1 lb.........6.98

X Hi-Fi Shutoff. Automate your hi-fi system. Turns your entire hi-fi system off after last record has been played. For any changer with automatic shutoff.
24 A 9234. Wt., 2 lbs....4.95

Y Stereo Demo Reco Three LP records stereo setup, equipme tests, music patterns, et
24 A 9010. Wt., 2 lbs...3.

Z Fused Outlet Box. amps. 10-ft. cord, wire plug. 13x$2\frac{1}{4}$x$1\frac{1}{4}$" outlets, 4 switches.
24 A 9343. $2\frac{1}{4}$ lbs.......4.

AA Fused Outlet Box. Abov 6 outlets, 1 switch.
24 A 9342. $2\frac{1}{2}$ lbs......4.

Eight exciting values in accurate VOM's

1000
ms/Volt
VOM

4^{95}

nd. Pocket-size VOM at an
ing low price. Ranges: AC,
/olts: 0-10-50-250-1000; DC
nt: 0-100 mA; Ohms: 0-150
00 ohms/volt DC sensitivity.
range/function switch. 3½x
″. High-impact plastic case.
, battery. Japan.
590. Shpg. wt., 10 oz. . . 4.95

20,000
Ohms/Volt
VOM

8^{95}

Midland. Sensitive, handy VOM. Precision resistors throughout. Reads DC volts to 2500; AC volts to 1000; ohms to 6 megs; −20 to +22 dB. Recessed nylon range selector. 3½″ 2-color scale. 4½x3¼x1″. With carry case, leads, battery. From Japan.
24 A 9318. Shpg. wt., 1 lb. **8.95**

30,000
Ohms/Volt
VOM

14^{95}

Midland. Accurate, mirrored scale. 30,000 ohms/volt DC, 15,000 ohms/volt AC. Reads AC, DC volts to 1200; DC current to 300 mA; ohms to 16 megs; −20 to +63 dB. Recessed nylon range selector. 5½x3½x1⅜″. With leather case, leads, battery. From Japan.
24 A 9372. Shpg. wt., 1 lb. . . . **14.95**

,000 Ohms/Volt VOM

0^{95} *Protected against accidental overload*

d. Accurate 20,000 ohms/volt
with overload protection circuit.
olor scale. Ranges: AC Volts,
-300-1200; DC Volts, 0-3-15-
0-1200; Ohms, 0-60K-6 megs;
it, 0-60 μA, 300 mA; dB, −20 to
4¾x3⅛x1⅛″. With case, test
battery. From Japan.
591. Shpg. wt., 1½ lbs. . . . **10.95**

Deluxe
20,000
Ohms/Volt
VOM

18^{95}

Midland. Precision resistors on all ranges. Ranges: DC Volts, 0-2.5-10-50-250-500-5000; AC Volts, 0-10-50-250-100; DC Current, 0-0.05-5-50-500 mA; Ohms, 0-12K-120K-1.2 megs; dB, −20 to +62. Big 3″ dial. High-impact bakelite case, 5½″x3⅝x2¾″. With leather case, batteries, leads. Japan.
24 A 9484. Shpg. wt., 2 lbs. **18.95**

Deluxe
30,000
Ohms/Volt
VOM

21^{95}

$5 Monthly*

Midland. 50-μA movement measures DC voltage down to 0.001 volt. Ranges: DC Volts, 0-3-6-12-60-300-600-1200-3000; AC Volts, 0-6-30-120-300-1200; DC Current, 0-0.03-6-60-600 mA; Ohms, 0-6K-600K-6 megs; dB, −20 to +46. 6x4x2″. Leather case, leads, instructions. Japan.
24 A 9485. Shpg. wt., 3 lbs. **21.95**

Ⓐ 50,000 Ohms-per-Volt VOM

xe VOM, ideal for serviceman or technician. Good
gh to meet today's rigid requirements in testing
ern electronic equipment. Has precision 1% resis-
for high accuracy. 50,000 ohms/volt DC sensitivity;
0 ohms/volt AC. Ranges: DC Volts, 0-0.6-3-12-
00-600-1200-3000; AC Volts, 0-6-30-120-300-1200;
Current, 0-30 μA, 0-6-60-600 mA; Ohms, 0-10K-1-
0 megs; dB, −20 to +63. Low resistance selector
h. Easy-to-read scales. Compact, 6x4x1⅞″. With
, batteries. From Japan.
9594. Shpg. wt., 1½ lbs. **19.95**

Ⓑ 100,000 Ohms-per-Volt VOM

ision VOM. Highly sensitive, full sized, reliable in-
ment suitable for laboratory use, but priced low
gh for any technician, serviceman, or hobbyist.
rate 4″ mirrored scale. Ranges: DC volts, 0-0.5-
0-50-250-1000; AC Volts, 0-2.5-10-50-250-1000;
Current, 0-10-250 μA, 0-2.5-25-250 mA, 0-10 amps;
s, 0-20K-200K-2 megs; dB from −20 to +62.
ged case, 7x5½x3¼″. Carrying handle. With leads,
ry, operating manual. From Japan.
9593. Shpg. wt., 8 lbs. **34.95**

Ⓐ 19^{95}

$5 monthly*

34^{95}

$5 monthly*

Ⓑ

Allied Guaranteed* Receiving Tube

ALLIED'S OWN MONEY-SAVING TUBES

✓ Money-saving prices **✓ Wide selection** **✓ Quantity savin**

Made for Allied, and specially priced to give you extra value! Save even more by buying quantity. *Allied will replace, free of charge, any tube that is defective due to faulty wor manship or material within two years of purchase date (not applicable to broken tube Ideal for replacement applications or designing new electronic equipment. **Quantity prices o apply to assorted tubes.** Some tubes are imported—country of origin is shown on tube carto *When ordering, specify Dept. No. 25 A 51 and tube type. Example: 25 A 51 OZ4.* Av. shp wt. per tube, 4 oz.

Stock-up on tubes with no money down . . see page 438

SAVE 27%
ON COLOR-TV
TUBE PACKAGE

Reg. $9.65

6^{98}

5 most popular types

Five-tube package with popular tubes used in color TV. Includes these types: 6FQ7/6CG7, 6U8A/6KD8, 6JE6A, 6EA8, 6DW4B. Shpg. wt., 1 lb.
24 A 9006 . . . . All 5 for 6.98

Dept. No.	Tube Type	EACH 1-9	EACH 10-49	EACH 50-Up
25 A 51	OZ4	1.53	1.36	1.22
25 A 51	1G3GT/1B3GT	1.53	1.36	1.22
25 A 51	1K3/1J3	1.53	1.36	1.22
25 A 51	1R5	2.00	1.78	1.60
25 A 51	1V2	1.15	1.02	.92
25 A 51	1X2B/1X2A	1.67	1.48	1.33
25 A 51	2CY5	1.98	1.76	1.58
25 A 51	3A3A/3B2	1.44	1.28	1.15
25 A 51	3AT2	1.53	1.36	1.22
25 A 51	3BZ6	1.49	1.32	1.19
25 A 51	3CB6/3CF6	1.33	1.18	1.06
25 A 51	3CU3	1.69	1.60	1.35
25 A 51	3DK6	1.33	1.18	1.06
25 A 51	3DT6A	1.46	1.30	1.17
25 A 51	3GK5	1.89	1.68	1.51
25 A 51	3GS8/3BU8	2.21	1.96	1.76
25 A 51	3HM5/3HA5	1.73	1.54	1.39
25 A 51	3V4	1.53	1.36	1.22
25 A 51	4BZ6	1.33	1.18	1.06
25 A 51	4CB6	1.28	1.14	1.03
25 A 51	4DT6A	1.46	1.30	1.17
25 A 51	4EH7	1.60	1.42	1.28
25 A 51	4EJ7	1.60	1.42	1.28
25 A 51	5AR4	1.91	.170	1.53
25 A 51	5AQ5	1.33	1.18	1.06
25 A 51	5CG8	1.67	1.48	1.33
25 A 51	5CL8A	2.21	1.96	1.76
25 A 51	5EA8	2.27	2.02	1.82
25 A 51	5LJ8	1.85	1.64	1.48
25 A 51	5U4GB	1.24	1.03	.99
25 A 51	5U8	1.91	1.70	1.53
25 A 51	5Y3GT	1.17	1.04	.94
25 A 51	6AB4	1.62	1.44	1.30
25 A 51	6AF3	1.60	1.42	1.28
25 A 51	6AF4A/6DZ4	2.00	1.78	1.60
25 A 51	6AG5	1.53	1.36	1.22
25 A 51	6AK5/EF95	2.14	1.90	1.71
25 A 51	6AL3	1.17	1.04	.94
25 A 51	6AL5	1.21	1.08	.97
25 A 51	6AM8A	1.82	1.62	1.46
25 A 51	6AN8A	2.09	1.86	1.67
25 A 51	6AQ5A	1.33	1.18	1.06
25 A 51	6AS5	1.69	1.50	1.35
25 A 51	6AU4GTA	1.98	1.76	1.58
25 A 51	6AU6A	1.19	1.06	.95
25 A 51	6AU8A	2.34	2.08	1.87
25 A 51	6AV6	.88	.78	.70
25 A 51	6AW8A	1.80	1.60	1.44
25 A 51	6AX4GTB	1.53	1.36	1.22
25 A 51	6AY3B	1.53	1.36	1.22
25 A 51	6BA6/EF93	1.21	1.08	.97
25 A 51	6BC8	2.00	1.78	1.60
25 A 51	6BE6	1.53	1.36	1.22
25 A 51	6BH8	2.07	1.84	1.66
25 A 51	6BJ6	1.62	1.44	1.30
25 A 51	6BK4B	3.40	3:02	2.72

Dept. No.	Tube Type	EACH 1-9	EACH 10-49	EACH 50-Up
25 A 51	6BK7B	2.00	1.78	1.60
25 A 51	6BL7GTA	2.27	2.02	1.82
25 A 51	6BL8/ECF80	1.21	1.08	.97
25 A 51	6BN4A	1.80	1.60	1.44
25 A 51	6BN6	1.85	1.64	1.48
25 A 51	6BN8	1.67	1.48	1.77
25 A 51	6BQ5/EL84	1.60	1.42	1.28
25 A 51	6BQ6GTB/6CU6	2.21	1.96	1.76
25 A 51	6BQ7A	2.05	1.82	1.71
25 A 51	6BR8A/6FV8A	2.12	1.88	1.69
25 A 51	6BU8	2.05	1.82	1.71
25 A 51	6BZ6	1.21	1.08	.97
25 A 51	6BZ7	1.87	1.66	1.49
25 A 51	6C4	1.33	1.18	1.06
25 A 51	6CB6A/6CF6	1.28	1.14	1.03
25 A 51	6CD6GA	2.61	2.32	2.09
25 A 51	6CG7	Use 6FQ7/6CG7		
25 A 51	6CG8A	1.73	1.54	1.39
25 A 51	6CL3	1.58	1.40	1.26
25 A 51	6CL6	1.87	1.66	1.49
25 A 51	6CL8A	1.87	1.66	1.49
25 A 51	6CM7	1.62	1.44	1.30
25 A 51	6CQ8	1.85	1.64	1.48
25 A 51	6CU5	1.60	1.42	1.28
25 A 51	6CX8	2.34	2.08	1.87
25 A 51	6CW4	2.21	1.96	1.76
25 A 51	6CY5	1.91	1.70	1.53
25 A 51	6CZ5	2.14	1.90	1.71
25 A 51	6DE4	1.46	1.30	1.17
25 A 51	6DE6	1.33	1.18	1.06
25 A 51	6DK6	1.33	1.18	1.06
25 A 51	6DQ5	3.54	3.14	2.83
25 A 51	6DR7	2.07	1.84	1.66
25 A 51	6DT6A	1.21	1.08	.97
25 A 51	6DW4B	1.58	1.40	1.26
25 A 51	6EA8	1.60	1.42	1.28
25 A 51	6EB8	2.27	2.02	1.82
25 A 51	6EH7/EF183	1.73	1.54	1.39
25 A 51	6EJ7/EF184	1.60	1.42	1.29
25 A 51	6EM5	1.80	1.60	1.44
25 A 51	6EM7	2.57	2.28	2.05
25 A 51	6EW6	1.35	1.20	1.08
25 A 51	6FG7	1.87	1.66	1.49
25 A 51	6FQ7/6CG7	1.10	.98	.87
25 A 51	6GE5	2.05	1.82	1.71
25 A 51	6GF7A	2.18	1.94	1.75
25 A 51	6GH8A	1.44	1.28	1.15
25 A 51	6GK6	1.53	1.36	1.22
25 A 51	6GM6	1.46	1.30	1.17
25 A 51	6GN8	1.94	1.72	1.55
25 A 51	6GV5	1.87	1.66	1.49
25 A 51	6GU7	1.53	1.36	1.22
25 A 51	6GW6/6DQ6B	1.89	1.68	1.51
25 A 51	6GW8/ECL86	1.37	1.22	1.10
25 A 51	6GX7	1.80	1.60	1.44
25 A 51	6GY6	1.44	1.28	1.15

Dept. No.	Tube Type	EACH 1-9	EACH 10-49	EACH 50-U
25 A 51	6HM5/6HA5	1.73	1.54	1.3
25 A 51	6HQ5	2.03	1.80	1.6
25 A 51	6HS5	3.49	3.10	2.7
25 A 51	6HS8/6KF8	1.94	1.72	1.5
25 A 51	6HZ6	1.35	1.20	1.0
25 A 51	6J6A	1.82	1.62	1.4
25 A 51	6JC6A	1.78	1.58	1.4
25 A 51	6JE6A	3.82	3.40	3.0
25 A 51	6JH6	1.33	1.18	1.0
25 A 51	6JS6B	3.29	2.93	2.6
25 A 51	6JT8	1.80	1.60	1.4
25 A 51	6JU8A	1.73	1.54	1.3
25 A 51	6K6GT	1.58	1.40	1.2
25 A 51	6KA8	2.03	1.80	1.6
25 A 51	6KY8A	3.26	2.90	2.6
25 A 51	6KZ8	1.67	1.48	1.3
25 A 51	6L6GC	2.36	2.10	1.8
25 A 51	6LB6	3.87	3.44	3.1
25 A 51	6MD8	2.18	1.94	1.7
25 A 51	6S4A	1.53	1.36	1.2
25 A 51	6SL7GT	1.98	1.76	1.5
25 A 51	6SN7GTB	1.60	1.42	1.2
25 A 51	6T8A	1.96	1.74	1.5
25 A 51	6U8A/6KD8	1.55	1.38	1.2
25 A 51	6V6GTA	1.69	1.50	1.3
25 A 51	6W6GT	1.85	1.64	1.4
25 A 51	6X4	1.24	1.03	.9
25 A 51	6X8A	1.71	1.52	1.3
25 A 51	7AU7	1.53	1.36	1.2
25 A 51	8AW8A	2.18	1.94	1.7
25 A 51	8B10	1.58	1.40	1.2
25 A 51	8FQ7/8CG7	1.10	.98	.8
25 A 51	10DE7	2.00	1.78	1.6
25 A 51	12AD6/12GA6	1.58	1.40	1.2
25 A 51	12AT7/ECC81	1.44	1.28	1.1
25 A 51	12AU6	1.46	1.30	1.1
25 A 51	12AU7A/ECC82	1.85	1.64	1.4
25 A 51	12AV6	.88	.78	.7
25 A 51	12AX4GTB	1.33	1.18	1.0
25 A 51	12AX7A/ECC83	1.21	1.08	.9
25 A 51	12AZ7A	1.67	1.48	1.3
25 A 51	12BA6	.95	.84	.7
25 A 51	12BE6	1.15	1.02	.9
25 A 51	12BH7A	1.58	1.40	1.2
25 A 51	12BY7A	1.44	1.28	1.1
25 A 51	12CU5/12C5	1.76	1.56	1.4
25 A 51	12GW6/12DQ6B	1.91	1.70	1.5
25 A 51	23Z9	2.12	1.88	1.6
25 A 51	35C5	1.21	1.08	.9
25 A 51	35W4	.74	.66	.5
25 A 51	35Z5GT	1.33	1.18	1.0
25 A 51	50C5	1.15	1.02	.9
25 A 51	50EH5	1.35	1.20	1.0
25 A 51	50L6GT	1.80	1.60	1.4
. . . . . .	. . . .	. . . .	. . . .	. .
. . . . . .	. . . .	. . . .	. . . .	. .

RCA Quality Receiving Tubes

FREE With Purchase of 5 Tubes. (May be assorted.) RCA Type 1A1348 receiving tube puller. Makes removing tubes from sockets quick and easy.
24 A 9148 G. Puller Alone. 6 oz...... .50

FREE With Purchase of 10 Tubes. (May be assorted.) RCA Type 1A1369 handy 6-way pin straightener.
24 A 9149 G. Straightener Alone. 4 oz. 1.00

RCA RECEIVING TUBE MANUAL
RCA
Color TV Service Handbook

FREE With Purchase of 15 Tubes. RCA Tube Manual. Receiving and picture tubes.
23 A 7676 EG. 1¼ lbs. 1.75

FREE With Purchase of 15 Tubes. RCA Color-TV Service Handbook. '67, '68.
23 A 7877 EG. ¾ lb. 2.00

Get All 4 Service Aids FREE with Purchase of 45 Tubes.

COMPLETE SELECTION OF COLOR TV TUBES

our full selection of tube types, Allied can provide ith complete satisfaction. Quantity prices for assortes apply to this listing only. We replace any tube that does not provide efficient performance for two years (does not apply to broken tubes). New tube types stocked as they are released. Av. shpg. wt., 4 oz.; per 10, 2½ lbs.

ALL TUBES IN THIS LISTING ARE VAILABLE ON CREDIT TERMS—see page 438

When ordering, specify Dept No., 25 A 28 AND Tube Type No. Example: 25 A 28 OZ4.

*Indicates Tube Types for Color TV, plus Other Applications

ibe Type	EA. in Quantities of 1-9	10-49	50-Up
	1.70	1.53	1.36
	1.70	1.53	1.36
	3.33	2.99	2.66
T	2.00	1.80	1.60
★	1.70	1.53	1.36
	1.30	1.17	1.04
T★	Use 1G3 GT/1B3GT		
	1.63	1.46	1.30
	1.53	1.38	1.22
T/1B3GT★	1.70	1.53	1.36
J3	1.70	1.53	1.36
	6.28	5.65	5.02
T	2.45	2.21	1.96
	2.23	2.00	1.78
DY87	1.28	1.15	1.02
	2.05	1.85	1.64
	1.70	1.53	1.36
	1.93	1.73	1.54
	1.93	1.73	1.54
	1.70	1.53	1.36
	1.28	1.15	1.02
	Use 1X2B/1X2A		
/1X2A★	1.85	1.67	1.48
	4.95	4.46	3.96
3/2DZ4★	2.05	1.85	1.64
	1.70	1.53	1.36
	1.65	1.49	1.32
★	1.43	1.28	1.14
	2.10	1.89	1.68
A	1.78	1.60	1.42
★	2.01	1.76	1.56
A	1.63	1.46	1.30
	2.45	2.21	1.96
	2.20	1.98	1.76
	2.45	2.21	1.96
★	3.23	2.90	2.58
	Use 2AF4B/2DZ4		
	2.45	2.21	1.96
	1.60	1.44	1.28
	1.85	1.67	1.48
	1.85	1.67	1.48
A	Use 2GK5		
	2.43	2.18	1.94
	2.10	1.89	1.68
	2.25	2.03	1.80
	1.93	1.73	1.54
★	1.93	1.73	1.54
	2.75	2.48	2.20
/3B2★	1.60	1.44	1.28
A/3DZ4	2.05	1.85	1.64
★	1.35	1.21	1.08
★	1.70	1.53	1.36
	1.48	1.33	1.18
	1.48	1.33	1.18
★	1.60	1.44	1.28
★	Use 3A3A/3B2		
	Use 3A3A/3B2		
	1.18	1.06	.94
/3CE5	1.35	1.21	1.08
★	1.77	1.60	1.42
★	1.80	1.62	1.44
★	1.73	1.55	1.38
A	1.70	1.53	1.36
★	2.38	2.14	1.90
A★	1.62	1.46	1.30
/3GS8	2.45	2.21	1.96
★	1.50	1.35	1.20
★	1.65	1.49	1.32
★	1.60	1.44	1.28

Tube Type	EA. in Quantities of 1-9	10-49	50-Up
3CB6/3CF6	1.48	1.33	1.18
3CE5	Use 3BC5/3CE5		
3CF6	Use 3CB6/3CF6		
3CN3A★	1.60	1.44	1.28
3CS6★	1.85	1.67	1.48
3CU3	Use 3CU3A		
3CU3A★	2.33	2.09	1.84
3CX3★	1.75	1.57	1.40
3CY5	1.95	1.76	1.56
3CZ3	2.02	1.82	1.66
3DB3★	2.01	1.82	1.62
3DC3	2.33	2.09	1.84
3DG4★	2.60	2.34	2.08
3DK6	1.48	1.33	1.18
3DT6A★	1.63	1.46	1.30
3DZ4	Use 3AF4A/3DZ4		
3EA5	1.78	1.60	1.42
3EH7/XF183	1.28	1.15	1.02
3EJ7/XF184	1.28	1.15	1.02
3ER5	2.23	2.00	1.78
3FH5	1.63	1.46	1.30
3FS5	2.15	1.94	1.72
3GK5★	2.10	1.89	1.68
3GS8	Use 3BU8/3GS8		
3HM5/3HA5	1.93	1.73	1.54
3HQ5★	2.63	2.36	2.10
3JC6A★	2.20	1.98	1.76
3KT6★	1.90	1.71	1.52
3Q4	1.68	1.51	1.34
3Q5GT	2.93	2.63	2.34
3S4	1.70	1.53	1.36
3V4	1.88	1.69	1.50
4AU6	1.70	1.53	1.36
4AV6	1.48	1.33	1.18
4BC8	2.00	1.80	1.60
4BL8/XCF80★	1.20	1.08	.96
4BN6	2.03	1.82	1.62
4BQ7A★	2.45	2.21	1.96
4BS8	2.13	1.91	1.70
4BU8/4GS8	2.23	2.00	1.78
4BZ6	1.48	1.33	1.18
4BZ7	2.45	2.21	1.96
4CB6	1.43	1.28	1.14
4CS6	1.70	1.53	1.36
4DE6	1.48	1.33	1.18
4DK6	1.70	1.53	1.36
4DT6A★	1.63	1.46	1.30
4EH7/LF183★	1.78	1.60	1.42
4EJ7/LF184★	1.78	1.60	1.42
4ES8/XCC189	2.75	2.49	2.20
4EW6	1.45	1.31	1.16
4GK5	1.95	1.76	1.56
4GM6	1.10	.99	.88
4GS8	Use 4BU8/4GS8		
4GX7	2.00	1.80	1.60
4HA5/PC900★	1.18	1.06	.94
4HA7	1.53	1.37	1.22
4HC7	1.53	1.37	1.22
4HM6	1.55	1.40	1.24
4HQ5	2.30	2.07	1.84
4HS8	1.85	1.67	1.48
4HT6	1.28	1.15	1.02
4JC6A	2.30	2.07	1.84
4JD6	2.30	2.07	1.84
4JH6	1.70	1.53	1.36
4KE8★	3.03	2.72	2.42
4KT6★	2.24	1.87	1.66
4LJ8★	2.05	1.85	1.64
5AM8★	2.45	2.21	1.96

Tube Type	EA. in Quantities of 1-9	10-49	50-Up
5AN8★	2.60	2.34	2.08
5AQ5★	1.48	1.33	1.18
5AR4/GZ34	2.13	1.91	1.70
5AS4A	1.73	1.55	1.38
5AS8	2.20	1.98	1.76
5AT8★	2.23	2.00	1.78
5AU4	Use 5V3A/5AU4		
5AV8	2.03	1.83	1.62
5AZ4	2.65	2.39	2.12
5B8	2.75	2.48	2.20
5BC3A★	1.70	1.53	1.36
5BE8	1.55	1.40	1.24
5BK7A	2.08	1.87	1.66
5BQ7A	2.15	1.94	1.72
5BR8	2.45	2.21	1.96
5BT8★	1.55	1.40	1.24
5BW8	1.60	1.44	1.28
5CG8	1.85	1.67	1.48
5CL8A	2.45	2.21	1.96
5CQ8	2.05	1.85	1.65
5CZ5	2.23	2.00	1.78
5DJ4	1.78	1.60	1.42
5EA8	2.53	2.27	2.02
5ES8/YCC189	2.75	2.47	2.20
5EU8	2.00	1.80	1.60
5EW6	1.70	1.53	1.36
5FG7	2.03	1.82	1.62
5FV8	1.63	1.47	1.30
5GH8A★	2.30	2.07	1.84
5GJ7★/LCF801	1.48	1.33	1.18
5GM6	1.63	1.46	1.30
5GX6	1.23	1.10	.98
5GX7★	2.00	1.80	1.60
5HA7	1.53	1.37	1.22
5HB7	1.70	1.53	1.36
5HG8/LCF86	1.85	1.67	1.48
5HZ6	1.63	1.46	1.30
5J6	1.85	1.67	1.48
5JK6★	1.93	1.73	1.54
5JL6★	1.93	1.73	1.54
5KD8	1.25	1.13	1.00
5KE8	2.90	2.61	2.32
5KZ8★	1.28	1.15	1.02
5LJ8	2.05	1.85	1.64
5MB8	1.83	1.64	1.46
5T8	2.23	2.01	1.78
5U4G★	1.38	1.24	1.10
5U4GB★	1.38	1.24	1.10
5U8	2.13	1.91	1.70
5U9/LCF201★	1.48	1.33	1.18
5V3A★/5AU4	2.08	1.87	1.66
5V4GA	2.15	1.94	1.72
5V6GT★	1.85	1.67	1.48
5X8	2.08	1.87	1.66
5Y3GT★	1.30	1.17	1.04
5Y4GA	1.23	1.10	.98
5Y4GT	1.70	1.53	1.36
5Z3	2.23	2.00	1.78
5Z4	Use 5Y3GT		
6A7	4.00	3.60	3.20
6A8	3.55	3.20	2.84
6AB4	1.80	1.62	1.44
6AC7	2.88	2.59	2.30
6AC10★	2.13	1.91	1.70
6AD10★	3.55	3.20	2.84
6AF3	1.78	1.60	1.42

TUBES CONTINUED.
ON NEXT PAGE

RCA Receiving Tubes

When ordering, Specify Dept. No., 25 A 2
AND Tube Type No. Example 25 A 28 6A

AS NEW TYPES ARE RELEASED, ALLIED WILL STOCK THEM *To Get Free Service Aids With Your Tubes, see page 287*

*Indicates Tube Types for Color TV, plus Other Applications

Tube Type	EA. in Quantities of		
	1-9	10-49	50-Up
6AF4★	2.23	2.00	1.78
6AF4A★	2.23	2.00	1.78
6AF6G	3.15	2.84	2.52
6AF9	1.78	1.60	1.42
6AF11	2.60	2.34	2.08
6AG5	1.90	1.71	1.52
6AG7★	3.43	3.08	2.74
6AG9★	2.83	2.54	2.26
6AG11	2.08	1.87	1.66
6AH4GT★	1.63	1.46	1.30
6AH6★	2.45	2.21	1.96
6AH9	2.38	2.14	1.90
6AK5/EF95	2.38	2.14	1.90
6AK8/EABC80	1.65	1.49	1.32
6AL3/EY88	1.30	1.17	1.04
6AL5★	1.35	1.21	1.08
6AL7GT	3.48	3.13	2.78
6AL11★	2.38	2.14	1.90
6AM4	2.78	2.50	2.22
6AM8A	2.03	1.82	1.62
6AN4	3.08	2.77	2.46
6AN8A★	2.33	2.09	1.86
6AQ5A★	1.48	1.33	1.18
6AQ6	1.63	1.46	1.30
6AQ7GT	2.35	2.12	1.88
6AQ8/ECC85★	1.50	1.35	1.20
6AR5	1.23	1.10	.98
6AR8	2.43	2.18	1.94
6AR11	2.25	2.03	1.80
6AS5	1.88	1.69	1.50
6AS8★	2.43	2.18	1.94
6AS11	2.55	2.30	2.04
6AT6★	1.20	1.08	.96
6AT8A★	2.60	2.34	2.08
6AU4GTA★	2.20	1.98	1.76
6AU5GT★	2.60	2.34	2.08
6AU6A★	1.33	1.19	1.06
6AU8A★	2.60	2.34	2.08
6AV5GA★	2.60	2.34	2.08
6AV6★	.98	.88	.78
6AV11★	2.20	1.98	1.76
6AW8A★	2.00	1.80	1.60
6AX3	1.45	1.31	1.16
6AX4GTB★	1.70	1.53	1.36
6AX5GT	1.93	1.73	1.54
6AX8	1.75	1.58	1.40
6AY3B	1.70	1.53	1.36
6AY11	2.25	2.03	1.80
6AZ8★	2.75	2.48	2.20
6B8	3.43	3.08	2.74
6B10	1.90	1.71	1.52
6BA3	1.53	1.37	1.22
6BA6/EF93★	1.35	1.21	1.08
6BA7	2.93	2.63	2.34
6BA8A★	2.33	2.09	1.86
6BA11★	2.23	2.00	1.78
6BC4	2.75	2.48	2.20
6BC5/6CE5	1.63	1.46	1.30
6BC7★	1.80	1.62	1.44
6BC8★/6BZ8	2.23	2.00	1.78
6BD6	1.18	1.06	.94
6BD11	2.78	2.50	2.22
6BE3/6BZ3★	1.88	1.69	1.50
6BE6	1.70	1.53	1.36
6BF5	1.68	1.51	1.34
6BF6	1.43	1.28	1.14
6BF11	2.53	2.28	2.02
6BG6G★	3.23	2.90	2.58
6BH3A	1.40	1.26	1.12
6BH6★	1.80	1.62	1.44
6BH8★	2.30	2.07	1.84
6BH11★	2.35	2.12	1.88
6BJ3	1.40	1.26	1.12
6BJ6	1.80	1.62	1.44
6BJ7★	1.48	1.33	1.18
6BJ8★	2.23	2.00	1.78
6BK4B★	3.78	3.40	3.02
6BK5★	1.75	1.58	1.40
6BK7B★	2.23	2.00	1.78
6BL7GTA★	2.80	2.52	2.24
6BL8/ECF80★	1.35	1.21	1.08
6BM8/ECL82★	1.45	1.31	1.16
6BN4A★	2.00	1.80	1.60
6BN6/6KS6★	2.05	1.85	1.64
6BN8★	1.85	1.67	1.48
6BN11★	2.25	2.03	1.80

Tube Type	EA. in Quantities of		
	1-9	10-49	50-Up
6BQ5/EL84★	1.78	1.60	1.42
6BQ6GTB/6CU6★	2.45	2.21	1.96
6BQ7A★	2.28	2.05	1.82
6BR8A★	2.35	2.12	1.88
6BS3A★	1.85	1.67	1.48
6BS8★	2.45	2.21	1.96
6BU8★	2.28	2.05	1.82
6BV8★	1.65	1.49	1.32
6BV11	2.48	2.23	1.98
6BW4	1.38	1.24	1.10
6BW8	1.68	1.51	1.34
6BW11	2.20	1.98	1.76
6BX7GT	2.80	2.52	2.24
6BY5GA	2.40	2.16	1.92
6BY6★	1.70	1.53	1.36
6BY8	1.35	1.21	1.08
6BZ6★	1.35	1.21	1.08
6BZ7★	2.23	2.00	1.78
6BZ8	Use 6BC8/6BZ8		
6C4★	1.48	1.33	1.18
6C5	2.68	2.41	2.14
6C6	3.93	3.54	3.14
6C9	2.75	2.48	2.20
6C10	1.85	1.67	1.48
6CA4	1.63	1.46	1.30
6CA5	1.50	1.35	1.20
6CA7/EL34	2.68	2.41	2.14
6CB5A★	4.68	4.21	3.74
6CB6A/6CF6★	1.43	1.28	1.14
6CD6GA★	3.10	2.79	2.48
6CE3	Use 6CG3/6CE3/6CD3		
6CE5	Use 6BC5/6CE5		
6CF6	Use 6CB6A/6CF6		
6CG3/6CE3/6CD3★	1.85	1.67	1.48
6CG7	Use 6FQ7/6CG7		
6CG8A★	1.93	1.73	1.54
6CH8	2.80	2.52	2.24
6CJ3★	1.80	1.62	1.44
6CK3	1.85	1.67	1.48
6CK4	1.78	1.60	1.42
6CL3★	1.75	1.57	1.40
6CL6★	2.08	1.87	1.66
6CL8A★	2.08	1.87	1.66
6CM3	2.45	2.21	1.96
6CM6★	1.93	1.73	1.54
6CM7	1.80	1.62	1.44
6CM8	2.03	1.82	1.62
6CN7★	2.23	2.00	1.78
6CQ4	1.78	1.60	1.42
6CQ8★	2.05	1.85	1.64
6CR6	1.48	1.33	1.18
6CS6★	1.65	1.49	1.32
6CS7	1.88	1.69	1.50
6CU5	1.78	1.60	1.42
6CU6	Use 6BQ6GTB/6CU6		
6CU8	2.30	2.07	1.84
6CW4★	2.45	2.21	1.96
6CW5/EL86★	1.38	1.24	1.10
6CX8	2.60	2.34	2.08
6CY5	2.13	1.91	1.70
6CY7	1.53	1.37	1.22
6CZ5★	2.38	2.14	1.90
6D10	2.33	2.09	1.86
6DA4	1.85	1.67	1.48
6DB5	2.50	2.25	2.00
6DC6★	1.93	1.73	1.54
6DC8/EBF89	1.53	1.37	1.22
6DE4	1.63	1.46	1.30
6DE6★	1.48	1.33	1.18
6DE7	2.23	2.00	1.78
6DG6GT	1.93	1.74	1.54
6DK6★	1.48	1.33	1.18
6DL4/EC88	3.98	3.58	3.18
6DL5/EL95	1.48	1.33	1.18
6DM4A	1.85	1.67	1.48
6DN6	3.50	3.15	2.80
6DN7	2.30	2.07	1.84
6DQ5★	3.93	3.54	3.14
6DQ6B★	Use 6GW6/6DQ6B		
6DR7	2.30	2.07	1.84
6DS4★	2.45	2.21	1.96
6DS5	1.83	1.65	1.46
6DT5	1.78	1.60	1.42
6DT6A★	1.35	1.21	1.08
6DT8	1.88	1.69	1.50
6DV4★	3.23	2.90	2.58
6DW4B★	1.75	1.58	1.40
6DX8/ECL84★	1.45	1.31	1.16

Tube Type	EA. in Quantitie		
	1-9	10-49	50
6DZ4★	2.05	1.85	
6E5	2.83	2.54	
6EA5	Use 6CY5		
6EA7	2.85	2.57	
6EA8★	1.78	1.60	
6EB8	2.53	2.27	
6EH4A★	4.10	3.69	
6EH5	1.78	1.60	
6EH7/EF183★	1.93	1.73	
6EH8	1.75	1.58	
6EJ4A★	4.25	3.82	
6EJ7/EF184★	1.78	1.60	
6EL4	3.78	3.40	
6EM5	2.00	1.80	
6EM7★	2.85	2.57	
6EQ7	1.48	1.33	
6ER5★	2.10	1.89	
6ES5	1.43	1.28	
6ES8/ECC189	2.73	2.45	
6ET7	2.00	1.80	
6EU7	1.80	1.62	
6EU8	1.85	1.67	
6EV5	1.78	1.60	
6EV7	1.63	1.46	
6EW6★	1.50	1.35	
6EW7	3.00	2.70	
6EZ5★	2.53	2.27	
6EZ8	1.78	1.60	
6F5	2.93	2.63	
6F6	3.08	2.77	
6F6GT	2.90	2.61	
6F8G	4.23	3.81	
6FA7	1.48	1.33	
6FD7	2.85	2.57	
6FE5	1.70	1.53	
6FG6	Use EM84/6F		
6FG7★	2.08	1.87	
6FH5★	2.28	2.05	
6FH8	2.20	1.98	
6FJ7★	2.08	1.87	
6FM7★	1.95	1.76	
6FM8	1.43	1.28	
6FQ5A	Use 6GK5/6FQ		
6FQ7/6CG7★	1.23	1.10	
6FS5	2.05	1.85	
6FV6	2.23	2.00	
6FV8A	2.35	2.12	
6FW5	1.93	1.73	
6FY5/EC97	1.38	1.24	
6FY7	1.75	1.58	
6G11	2.20	1.98	
6GB5/EL500	1.90	1.71	
6GC5★	2.50	2.25	
6GE5	2.28	2.05	
6GF5	1.90	1.71	
6GF7A★	2.43	2.18	
6GH8A★	1.60	1.44	
6GJ5A	3.08	2.77	
6GJ7/ECF801★	1.55	1.40	
6GK5★/6FQ5A	2.08	1.87	
6GK6★	1.70	1.53	
6GL7★	2.90	2.61	
6GM5	1.53	1.37	
6GM6★	1.63	1.46	
6GN8	2.30	2.07	
6GQ7★	1.88	1.69	
6GT5A	3.18	2.86	
6GU5	2.05	1.85	
6GU7★	1.85	1.67	
6GV5	2.08	1.87	
6GV8/ECL85	2.30	2.07	
6GW6/6DQ6B★	2.33	2.09	
6GW8/ECL86	1.53	1.37	
6GX6★	1.60	1.44	
6GX7★	2.00	1.80	
6GY5	2.30	2.07	
6GY6★	1.45	1.31	
6GY8	1.95	1.76	
6H6	2.85	2.57	
6HA5★	Use 6HM5/6H		
6HB5	2.30	2.07	
6HB6★/6HA6	2.23	2.00	
6HB7★	2.00	1.80	
6HE5★	2.10	1.89	
6HF5★	4.03	3.62	
6HF8★	2.85	2.57	
6HG5	1.48	1.33	
6HG8/ECF86★	1.85	1.67	

hen ordering, Specialty Dept. No., 25 A 28,
Tube Type No. Example: 25 A 28 6HJ8.

Receiving Tubes

RCA

QUANTITY PRICES FOR ASSORTED RCA TUBES *To Get Free Service Aids with Your Tubes, see page 287*

*Indicates Tube Types for Color TV, plus Other Applications

be Type	EA. in Quantities of 1-9	10-49	50-Up
	1.55	1.40	1.24
	1.95	1.76	1.56
★	1.53	1.37	1.22
/6HA5★	1.93	1.73	1.54
	1.48	1.33	1.18
★	2.25	2.03	1.80
	1.28	1.15	1.02
	1.85	1.67	1.48
★	3.88	3.49	3.10
	1.85	1.67	1.48
★	2.15	1.94	1.72
/EM87	2.42	2.18	1.94
	3.88	3.49	3.10
★	1.50	1.35	1.20
	2.30	2.07	1.84
T	2.05	1.85	1.64
★	2.03	1.82	1.62
	3.08	2.77	2.46
	Use 6Z10/6J10		
	2.40	2.16	1.92
	2.93	2.63	2.34
★	1.98	1.78	1.58
	1.53	1.37	1.22
★	1.78	1.60	1.42
★	Use 6LQ6/6JE6C		
	1.85	1.67	1.48
	3.43	3.08	2.74
	3.25	2.93	2.60
★	1.48	1.33	1.18
★	2.85	2.57	2.28
	1.92	1.73	1.54
★	2.03	1.82	1.62
★	2.48	2.23	1.98
★	2.45	2.21	1.96
	1.83	1.64	1.46
	1.93	1.73	1.54
	3.18	2.86	2.54
★	3.65	3.29	2.92
	2.70	2.43	2.16
	2.00	1.80	1.60
	3.18	2.86	2.91
★	1.93	1.73	1.54
	2.20	1.98	1.76
ECF802★	1.55	1.40	1.24
	2.33	2.09	1.86
	1.78	1.60	1.42
T	1.75	1.58	1.40
	2.95	2.66	2.36
	3.85	3.47	3.08
6Q11	1.90	1.71	1.52
★	2.25	2.03	1.80
	4.25	3.82	3.40
	Use 6U8A/6KD8		
★	2.83	2.55	2.26
	1.48	1.33	1.18
★	4.10	3.69	3.28
	1.73	1.55	1.38
	3.60	3.24	2.88
	2.13	1.91	1.80
	Use 6BN6/6KS6		
★	1.65	1.49	1.32
★	2.45	2.21	1.96
	2.40	2.16	1.92
	2.93	2.63	2.34
	3.63	3.27	2.90
★	1.85	1.67	1.48
	4.83	4.34	3.86
★	2.63	2.36	2.10
	3.48	3.13	2.78
★	4.30	3.87	3.44
	2.35	2.12	1.88
	2.38	2.14	1.90
	3.10	2.79	2.48
	4.22	3.80	3.38
	2.33	2.09	1.86
	3.85	3.47	3.08
	3.78	3.40	3.02
	2.05	1.85	1.64
★	2.23	2.00	1.78
LCF80	1.20	1.08	.96
6JE6C	4.25	3.83	3.40
	2.77	2.50	2.22
	3.65	3.29	2.92
	2.38	2.14	1.90
	1.75	1.58	1.40
	2.38	2.14	1.90
LCF802	1.30	1.17	1.04
	1.95	1.76	1.56

Tube Type	EA. in Quantities of 1-9	10-49	50-Up
6M11★	2.50	2.25	2.00
6MB8	1.83	1.64	1.46
6MD8★	2.43	2.18	1.94
6ME8★	2.53	2.27	2.02
6MF8	2.38	2.14	1.90
6MG8	1.23	1.10	.98
6MJ8	2.33	2.09	1.86
6MK8	2.15	1.94	1.72
6MN8★	2.10	1.89	1.68
6MQ8	1.90	1.71	1.52
6N7	2.53	2.27	2.02
6N7GT	2.80	2.52	2.24
6Q7	2.95	2.66	2.36
6RK19★	2.43	2.18	1.94
6S4A★	1.70	1.53	1.36
6SA7	2.95	2.66	2.36
6SA7GT	2.20	1.98	1.76
6SB7Y	2.98	2.68	2.38
6SC7	2.68	2.41	2.14
6SF5	2.50	2.25	2.00
6SF7	3.15	2.85	2.52
6SG7	2.80	2.52	2.24
6SH7	3.08	2.77	2.46
6SJ7	2.45	2.21	1.96
6SK7	2.50	2.25	2.00
6SK7GT	2.75	2.48	2.20
6SL7GT	2.20	1.98	1.76
6SN7GTB★	1.78	1.60	1.42
6SQ7	2.48	2.23	1.98
6SR7	2.45	2.21	1.96
6T4★	2.58	2.32	2.06
6T8A★	2.18	1.96	1.74
6T9	2.20	1.98	1.76
6T10★	2.33	2.09	1.86
6U5	3.70	3.33	2.96
6U8A/6KD8★	1.73	1.55	1.38
6U9/ECF201	1.45	1.31	1.16
6U10★	1.90	1.75	1.52
6V3A	2.28	2.05	1.82
6V6	3.40	3.06	2.72
6V6GTA★	1.88	1.69	1.50
6W4GT	1.65	1.49	1.32
6W6GT★	2.05	1.85	1.64
6X4	1.38	1.24	1.10
6X5GT	1.65	1.49	1.32
6X8A★	1.90	1.71	1.52
6X9/ECF200★	1.48	1.33	1.18
6Y6GA/6Y6G	2.48	2.23	1.98
6Y9★/EFL200	1.48	1.33	1.18
6Z4	Use 84/6Z4		
6Z10/6J10★	2.75	2.48	2.20
7A7	3.58	3.22	2.86
7AU7★	1.70	1.53	1.36
7C5	1.68	1.51	1.34
7C7	1.70	1.53	1.36
7EY6	1.75	1.58	1.40
7F7	3.75	3.38	3.00
7F8	4.13	3.72	3.30
7HG8/PCF86	1.38	1.24	1.10
7N7	3.55	3.20	2.84
8AR11★	2.18	1.96	1.74
8AU8	1.93	1.73	1.54
8AW8A	2.43	2.18	1.94
8B10	1.75	1.58	1.40
8BA8A	1.73	1.54	1.38
8BA11	2.08	1.87	1.66
8BH8	1.68	1.51	1.34
8BM11	2.35	2.12	1.88
8BN8	1.85	1.67	1.48
8BN11	2.18	1.96	1.74
8BQ5	1.88	1.69	1.50
8BQ11★	2.15	1.94	1.72
8BU11★	2.50	2.25	2.00
8CG7	Use 8FQ7/8CG7		
8CM7	1.35	1.21	1.08
8CN7	1.53	1.37	1.22
8CS7	2.00	1.80	1.60
8CW5/XL86	1.28	1.15	1.02
8CX8	2.20	1.98	1.76
8EB8	2.05	1.85	1.64
8EM5	1.38	1.24	1.10
8ET7	2.08	1.87	1.66
8FQ7/8CG7★	1.23	1.10	1.98
8GJ7/PCF801	1.45	1.31	1.16
8GN8	2.08	1.87	1.66
8GU7★	1.60	1.44	1.28
8JU8A	1.68	1.51	1.34
8JV8★	2.15	1.94	1.72
8KA8	2.33	2.09	1.86

Tube Type	EA. in Quantities of 1-9	10-49	50-Up
8LC8	2.38	2.14	1.90
8LT8	1.63	1.46	1.30
9A8/PCF80★	1.33	1.19	1.06
9AU7	1.48	1.33	1.18
9BJ11	2.40	2.16	1.92
9BR7	1.58	1.42	1.26
9EA8	1.53	1.37	1.22
9GV8/XCL85	1.70	1.53	1.36
9KC6★	2.18	1.96	1.74
9KX6	2.08	1.87	1.66
9KZ8	1.48	1.33	1.18
9LA6	2.10	1.89	1.68
9U8A	1.55	1.40	1.24
10AL11	2.28	2.05	1.82
10BQ5	1.38	1.24	1.10
10C8	2.58	2.32	2.06
10CW5/LL86	1.28	1.15	1.02
10DE7	2.23	2.00	1.78
10DR7	2.23	2.00	1.78
10DX8/LCL84	1.38	1.24	1.10
10EG7	2.18	1.96	1.74
10EM7	2.45	2.21	1.96
10EW7	2.85	2.57	2.28
10GF7A★	2.38	2.14	1.90
10GK6	1.73	1.55	1.38
10GN8	2.23	2.00	1.78
10HF8	2.68	2.41	2.14
10JA8	2.08	1.87	1.66
10JT8★	2.03	1.82	1.62
10JY8	1.83	1.64	1.46
10KR8	2.13	1.91	1.70
10KU8	2.43	2.18	1.94
10LB8★	2.35	2.11	1.88
10LE8	2.94	2.66	2.36
10LW8	2.13	1.91	1.70
10LZ8	2.08	1.87	1.66
11AR11	2.05	1.85	1.64
11BM8	2.93	2.64	2.34
11BQ11	2.05	1.85	1.64
11BT11	3.25	2.93	2.80
11CA11★	2.83	2.54	2.26
11CY7	1.80	1.62	1.44
11FY7★	1.70	1.53	1.36
11HM7★	2.63	2.36	2.10
11JE8	1.93	1.73	1.54
11KV8	2.95	2.66	2.36
11LQ8★	2.95	2.66	2.36
11LT8	1.63	1.46	1.30
11Y9/LFL200	1.85	1.67	1.48
12AB5	1.93	1.73	1.54
12AC6	1.05	.95	.84
12AD6	1.75	1.58	1.40
12AE6A	1.55	1.40	1.24
12AE10	2.33	2.09	1.86
12AF3	2.13	1.91	1.70
12AF6	1.58	1.42	1.26
12AL5	1.38	1.24	1.10
12AL8	3.08	2.77	2.47
12AL11	2.83	2.54	2.26
12AQ5	1.75	1.58	1.40
12AT6	1.38	1.24	1.10
12AT7/ECC81★	1.60	1.44	1.28
12AU6	1.45	1.31	1.16
12AU7A/ECC82★	1.38	1.24	1.10
12AV5GA	2.73	2.45	2.18
12AV6★	.98	.88	.78
12AV7★	2.08	1.87	1.66
12AW6	1.78	1.60	1.42
12AX3★	1.50	1.35	1.20
12AX4GTB	1.48	1.33	1.18
12AX7A/ECC83★	1.35	1.22	1.08
12AY3A	1.45	1.31	1.16
12AY7	2.85	2.57	2.28
12AZ7A★	1.85	1.67	1.48
12B4A	1.75	1.58	1.40
12BA6	1.05	.95	.84
12BA7	2.95	2.66	2.36
12BD6	1.18	1.06	.94
12BE3	1.73	1.55	1.38
12BE6	1.28	1.15	1.02
12BF6	1.18	1.06	.94
12BF11★	3.08	2.77	2.46
12BH7A★	1.75	1.58	1.40
12BK5★	1.88	1.69	1.50
12BL6	1.85	1.67	1.48
12BN6	1.83	1.64	1.46

TUBES CONTINUED ON NEXT PAGE

RCA Receiving Tubes

When Ordering, Specify Dept. No., 25 A 28
Tube Type No. Example: 25 A 28 12BQ6GTB/12C

AS NEW TYPES ARE RELEASED. ALLIED WILL STOCK THEM *To Get Free Service Aids with Your Tubes, see page 287*

*Indicates Tube Types for Color TV, plus Other Applications

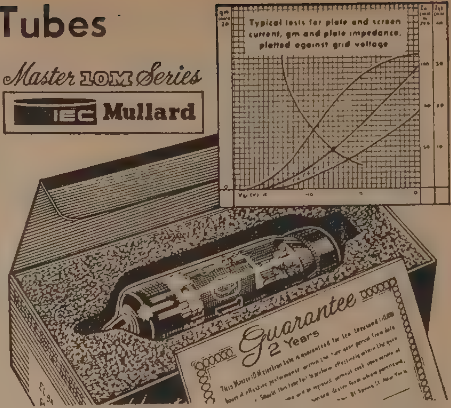
Tube Type	EA. in Quantities of:		
	1-9	10-49	50-Up
12BQ6GTB/ 12CU6	2.23	2.00	1.78
12BR7	1.53	1.37	1.22
12BS3A	1.85	1.67	1.48
12BT3	1.43	1.28	1.14
12BV7	1.65	1.49	1.32
12BV11	2.40	2.16	1.92
12BW4	1.68	1.51	1.34
12BY7A★	1.60	1.44	1.28
12BZ6	1.20	1.08	.96
12BZ7	2.08	1.87	1.66
12C5	Use 12CU5/12C5		
12CA5	1.98	1.78	1.58
12CL3	1.75	1.58	1.40
12CN5	1.63	1.46	1.30
12CR6	1.48	1.33	1.18
12CU5/12C5	1.95	1.76	1.56
12CU6	Use 12BQ6GT/12CU6		
12CX6	1.38	1.24	1.10
12D4	1.53	1.37	1.22
12DB5	1.30	1.17	1.04
12DK6	1.15	1.04	.92
12DQ6B	Use 12GW6/12DQ6B		
12DQ7	1.63	1.46	1.30
12DS7	2.70	2.43	2.16
12DT5	1.55	1.40	1.24
12DT8	2.00	1.80	1.60
12DW7	1.53	1.37	1.22
12DY8	3.98	3.58	3.18
12DZ6	1.80	1.62	1.44
12ED5	1.35	1.21	1.08
12EK6	1.78	1.60	1.42
12EQ7	1.38	1.24	1.10
12F8	1.63	1.47	1.30
12FK6	1.28	1.15	1.02
12FM6	1.30	1.17	1.04
12FQ8	2.60	2.34	2.08
12FV7	1.70	1.53	1.36
12FX5	1.63	1.46	1.30
12GC6★	2.18	1.96	1.74
12GE5★	2.25	2.03	1.80
12GJ5A	2.45	2.21	1.96
12GN7A★	2.55	2.30	2.04
12GT5	2.68	2.41	2 14
12GW6/12DQ6B	2.48	2.23	1.98
12H6	2.23	2.01	1.78
12HE7	3.40	3.06	2.72
12HG7★	2.55	2.30	2.04
12HL7★	2.23	2.00	1.78
12J5GT	2.40	2.16	1.92
12J8	2.18	1.96	1.74
12JB6A	3.10	2.79	2.48
12JN6	1.95	1.76	1.56
12JN8	1.85	1.67	1.48
12JQ6	2.23	2.00	1.78
12JT6A	2.48	2.23	1.98
12K5	1.73	1.55	1.38
12K7GT	3.30	2.97	2.64
12KL8	1.23	1.10	.98
12L6GT	1.78	1.60	1.42
12MD8	2.43	2.18	1.94
12R5	1.68	1.51	1.34
12SA7	2.95	2.66	2.36
12SC7	2.60	2.34	2.08
12SF5	1.93	1.73	1.54
12SF7	3.10	2.79	2.48
12SG7	2.35	2.12	1.88
12SH7	2.70	2.43	2.16
12SJ7	2.15	1.94	1.72
12SK7	2.85	2.57	2.28
12SK7GT	2.23	2.01	1.78
12SL7GT	2.48	2.23	1.98
12SN7GTA	1.93	1.73	1.54
12SQ7	2.48	2.23	1.98
12T10★	2.33	2.09	1.86
12V6GT	2.23	2.01	1.78
12W6GT	2.45	2.21	1.96
12X4	1.13	1.01	.90
13CW4	2.53	2.27	2.02
13DE7	2.38	2.14	1.90
13DR7	2.85	2.57	2.28
13EM7/15EA7	2.93	2.63	2.34
13FD7	2.85	2.57	2.28
13FM7	1.70	1.53	1.36
13GB5/XL500	1.85	1.67	1.48
13GF7A	2.35	2.12	1.88
13J10	Use 13Z10/13J10		
13V10	2.23	2.00	1.78

Tube Type	EA. in Quantities of:		
	1-9	10-49	50-Up
13Z10/13J10	2.78	2.50	2.22
14BL11	2.80	2.52	2.24
14BR11	3.08	2.77	2.46
14GT8	1.73	1.55	1.38
14JG8	1.55	1.40	1.24
15AF11	2.38	2.14	1.90
15BD11A	2.75	2.48	2.20
15CW5/PL84★	1.23	1.09	.98
15DQ8/PCL84★	1.70	1.53	1.36
15FM7	1.70	1.53	1.36
15FY7	1.95	1.76	1.56
15KY8A	2.90	2.61	2.32
15LE8★	3.83	3.45	3.06
16A8/PCL82	1.70	1.53	1.36
16AK9	2.95	2.66	2.36
16AQ3/XY88	1.35	1.21	1.08
16BQ11	2.18	1.96	1.74
16BX11	2.55	2.30	2.04
16GK6	1.53	1.37	1.22
16GY5	2.43	2.18	1.94
17AB10/17X10	2.23	2.00	1.78
17AX3	1.30	1.17	1.04
17AX4GTA	1.85	1.67	1.48
17AY3A	1.70	1.53	1.36
17BB14★	5.23	4.70	4.18
17BE3/17BZ3	1.60	1.44	1.28
17BF11	2.35	2.12	1.88
17BH3	1.43	1.28	1.14
17BQ6GTB	2.60	2.34	2.08
17BS3A/17DW4A	1.70	1.53	1.36
17BW3	1.60	1.44	1.28
17BZ3	Use 17BE3/17BZ3		
17C5	Use 17CU5/17C5		
17C9	3.58	3.22	2.86
17CK3	1.78	1.60	1.42
17CT3	1.48	1.33	1.18
17CU5/17C5	1.70	1.53	1.36
17D4	2.03	1.82	1.62
17DE4	1.83	1.64	1.46
17DM4A	2.03	1.82	1.62
17DQ6B	Use 17GWG/17DQ6B		
17DW4A	Use 17BS3A/17DW4A		
17EW8/HCC85	1.38	1.24	1.10
17GE5	2.18	1.96	1.74
17GJ5A	3.03	2.72	2.42
17GT5A	2.78	2.50	2.22
17GV5	2.10	1.89	1.68
17GW6/17DQ6B	2.63	2.36	2.10
17JB6A	2.75	2.48	2.20
17JG6A	3.15	2.84	2.52
17JM6A	2.48	2.23	1.98
17JN6	2.25	2.03	1.80
17JT6A	2.30	2.07	1.84
17JZ8	1.78	1.60	1.42
17KV6★	3.93	3.54	3.14
17LD8	Use 15KY8A		
17X10	Use 17AB10/17X10		
18AJ10	2.20	1.98	1.76
18FW6A	1.23	1.10	.98
18FX6A	1.48	1.33	1.18
18FY6A	1.48	1.33	1.18
18GB5★	2.58	2.32	2.06
18GD6A	1.48	1.33	1.18
19AU4GTA★	2.18	1.96	1.74
19BG6GA	3.33	2.99	2.66
19CG3	1.70	1.53	1.36
19CL8A	1.85	1.67	1.48
19EA8	2.23	2.00	1.78
19EZ8	2.25	2.03	1.80
19GQ7	1.90	1.71	1.52
19HR6	1.23	1.10	.98
19HS6	1.20	1.08	.96
19HV8	1.88	1.69	1.50
19J6	1.85	1.67	1.48
19JN8	1.60	1.44	1.28
19KG8	1.55	1.40	1.24
19T8	2.45	2.21	1.96
19X8	2.05	1.85	1.64
20AQ3/L788	1.63	1.46	1.30
20EZ7	1.70	1.53	1.36
21GY5	2.33	2.09	1.86
21HB5A	2.38	2.14	1.90
21JV6	2.33	2.09	1.86
21JZ6	2.43	2.18	1.94
21KA6	2.23	2.00	1.78
21LG6	3.83	3.44	3.06
21LR8★	2.38	2.14	1.90
21LU8	2.38	2.14	1.90
22BH3A	1.55	1.40	1.24
22BW3	1.70	1.53	1.36

Tube Typo	EA. In Quantiti	
	1-9	10-49
22DE4	2.10	1.89
22JF6	3.43	3.08
22JG6A	3.10	2.79
22JR6	3.10	2.79
22JU6	3.18	2.86
22KM6★	4.10	3.69
23JS6A	6.68	6.01
23Z9	2.35	2.12
24BF11	2.60	2.34
24JE6A★	4.25	3.83
24JZ8	2.25	2.03
24LQ6/24JE6C	4.25	3.83
25AV5GA	2.83	2.55
25AX4GT	1.53	1.37
25BK5	1.70	1.53
25BQ6GTB/25CU6	2.20	1.98
25C5	2.05	1.85
25CA5	1.80	1.62
25CD6GB	3.20	2.88
25CG3★	1.70	1.57
25CK3★	1.70	1.57
25CU6	Use 25 BQ6GTB/	
25DN6	3.30	3.03
25EC6	3.08	2.77
25EH5	1.85	1.67
25F5A	1.93	1.73
25L6GT	1.85	1.67
25W4GT	1.85	1.67
25Z6GT	1.93	1.74
27GB5/PL500	1.85	1.67
31AL10	2.50	2.25
31JS6A★	3.65	3.29
32ET5A	1.20	1.08
32HQ7	3.10	2.79
33GT7	3.48	3.13
33GY7A	3.03	2.72
33JV6	2.33	2.09
34CE3	1.95	1.76
34GD5A	1.48	1.33
35B5	1.60	1.44
35C5	1.35	1.21
35EH5	1.70	1.53
35GL6	1.45	1.31
35L6GT	1.93	1.73
35W4	.83	.74
35Y4	2.25	2.03
35Z4GT	1.28	1.15
35Z5GT	1.48	1.33
36AM3B	1.28	1.15
38HE7	3.33	2.99
38HK7	3.28	2.95
40KD6	4.05	3.65
42	2.43	2.18
42KN6★	3.60	3.24
43	3.60	3.24
50A5	2.93	2.63
50B5	1.48	1.33
50BM8	2.18	1.96
50C5	1.28	1.15
50DC4	1.20	1.08
50EH5	1.50	1.35
50FE5	2.23	2.01
50FK5	1.10	.99
50HC6	1.20	1.08
50HK6	1.08	.97
50L6GT	2.00	1.80
50X6	2.93	2.63
50Y6GT	2.18	1.96
53HK7	4.18	3.76
60FX5	1.48	1.33
80	2.40	2.16
84/6Z4	2.60	2.34
117L7/M7GT	7.38	6.64
117N7GT	6.43	5.79
117Z3	2.25	2.03
5879	2.50	2.25
6973	2.30	2.07
7025	1.55	1.40
7027A	3.73	3.35
7189	1.93	1.73
7199	2.45	2.21
7247	1.60	1.44
7355	1.84	1.64
7408	1.68	1.51
7543	1.63	1.46
7581A	2.28	2.05
7591A	1.40	1.26
7695	2.20	1.98
7868	2.38	2.14
8417	2.83	2.54
EM84/6FG6	1.68	1.51

Laboratory-Tested Hi-Fi Tubes

ALITY TUBES GUARANTEED FOR 10,000 HOURS


Master 10M Series
Mullard
Typical tests for plate and screen current, gm and plate impedance, plotted against grid voltage
Guarantee
2 Years

INDIVIDUALLY TESTED FOR . .

- Tube-to-Tube Uniformity
- Noise and Microphonics
- Distortion
- Heater Current

fully designed and selected tubes, guaranteed for 10,000 hours of ef-
ıt and effective performance within a two-year period from the date
ırchase. (Does not apply to broken tubes.) Individually laboratory-
d to assure long life. Feature tube-to-tube and section-to-section uniform-
Iave stable, close tolerance characteristics. Highly recommended for
critical circuit application such as in stereo hi-fi components, broad-
and antenna systems, instrumentation, computers, radar, commercial
d and public address systems, and many other devices. Ideal for today's
ıically advanced and exacting electronic assemblies. Each is packaged
sealed in a plastic-foam cushion for extra protection. Give optimum
ts with existing equipment as well as in designing new equipment. From
t Britain. Av. shpg. wt. per tube, 5 oz.

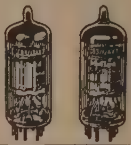
ıen Ordering, Please Specify Full Dept. No. AND Tube Type No.
Example: 25 A 21 6AB8

pt. No.	Tube Type	EACH	Dept. No.	Tube Type	EACH	Dept. No.	Tube Type	EACH
5 A 21	6AB8	2.75	25 A 21	6HG8	3.10	25 A 21	ECF86/6HG8	3.10
5 A 21	6AJ8	2.65	25 A 21	6J6	2.55	25 A 21	EF86/6267	2.50
5 A 21	6AK5	3.25	25 A 21	6J6A	2.55	25 A 21	PCF86/8HG8	2.65
5 A 21	6AK8	2.80	25 A 21	6T8A	2.80	25 A 21	ECC88/6DJ8	3.10
5 A 21	6AL5	1.95	25 A 21	8HG8	2.65	25 A 21	KT88	5.60
5 A 21	6AQ5	2.15	25 A 21	9A8	3.25	25 A 21	EBF89/6DC8	2.65
5 A 21	6AQ5A	2.15	25 A 21	12AT7	2.55	25 A 21	EF89/6DA6	2.55
5 A 21	6AQ8	2.40	25 A 21	12AU7	2.20	25 A 21	EBC90/6AT6	2.00
5 A 21	6AT6	2.00	25 A 21	12AU7A	2.20	25 A 21	EC90/6C4	2.85
5 A 21	6AU6	2.05	25 A 21	12AV6	1.95	25 A 21	EK90/6BE6	2.10
5 A 21	6AU6A	2.05	25 A 21	12AX7	2.20	25 A 21	EL90/6AQ5	2.55
5 A 21	6AV6	1.95	25 A 21	12AX7A	2.20	25 A 21	EB91/6AL5	1.95
5 A 21	6BA6	2.00	25 A 21	12DW7	2.55	25 A 21	EBC91/6AV6	1.95
5 A 21	6BE6	2.10	25 A 21	15CW5	2.50	25 A 21	ECC91/6J6	2.55
5 A 21	6BL8	3.05	25 A 21	5654/6AK5W	4.50	25 A 21	HBC91/12AV6	1.95
5 A 21	6BQ5	2.15	25 A 21	KT66	3.68	25 A 21	EF93/6BA6	2.00
5 A 21	6BQ5A	2.15	25 A 21	KT77	4.28	25 A 21	EF94/6AU6	2.05
5 A 21	6C4	2.85	25 A 21	EABC80/6AK8	2.80	25 A 21	EC95/6ER5	2.40
5 A 21	6DC8	2.65	25 A 21	ECF80/6BL8	3.05	25 A 21	EF95/6AK5	3.25
5 A 21	6DJ8	3.10	25 A 21	ECL80/6AB8	2.75	25 A 21	EL95/6DL5	2.55
5 A 21	6DL5	2.55	25 A 21	PCF80/9A8	3.25	25 A 21	EC97/6FY5	2.35
5 A 21	6DX8	2.85	25 A 21	ECC81/12AT7	2.55	25 A 21	EF183/6EH7	2.60
5 A 21	6EH7	2.60	25 A 21	ECH81/6AJ8	2.65	25 A 21	EF184/6EJ7	2.60
5 A 21	6EJ7	2.60	25 A 21	ECC82/12AU7	2.20	25 A 21	ECC189/6ES8	3.50
5 A 21	6ER5	2.40	25 A 21	ECC83/12AX7	2.20	25 A 21	6267	2.50
5 A 21	6ES8	3.50	25 A 21	ECL84/6DX8	2.85	25 A 21	7025	2.35
5 A 21	6EU7	2.35	25 A 21	EL84/6BQ5	2.15	25 A 21	7247/12DW7	2.55
5 A 21	6FY5	2.35	25 A 21	PL84/15CW5	2.50	....	....	....
5 A 21	6GK5	2.40	25 A 21	ECC85/6AQ8	2.40	....	....	....

MULLARD MATCHED PAIRS FOR SUPERIOR HI-FI PERFORMANCE

: optimum performance, it is important that the
oming signal be amplified proportionately in the
ıh-pull output tubes in an audio amplifier. This pre-
ıts a loss of power as well as distortion of the complex
ve forms of the audio signal and their harmonics.

Mullard's laboratory-balanced matched pairs are designed for this purpose. Matched pairs are available for virtually every high fidelity amplifier. They will perform in each circuit exactly as the equipment was designed to operate. Av. shpg. wt., 10 oz.

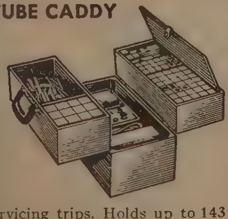


When Ordering, Specify Dept. No. (25 A 21) AND Tube Type No.

Dept. No.	Tube Type	PER PAIR	Dept. No.	Tube Type	PER PAIR	Dept. No.	Tube Type	PER PAIR
25 A 21	6AQ5A/EL90MP	2.48	25 A 21	45B5/UL84MP	2 96	....	EL90MP	Use 6AQ5A
....	6AW8/ECL86MP	Use 6GW8	25 A 21	50BM8/UCL82MP	3.48	....	EL95MP	Use 6DL5
25 A 21	6BM8/ECL82MP	3.30	25 A 21	ECL86MP	3.43	25 A 21	KT66MP	8 00
25 A 21	6BQ5/EL84MP	3.05	....	EL34MP	Use 6CA7	25 A 21	KT77MP	9.25
25 A 21	6CA7/EL34MP	5.93	....	EL37MP	Use 6CA7	25 A 21	KT88MP	11.95
25 A 21	6CW5/EL86MP	2.87	25 A 21	EL84MP	2.47	....	UCL82MP	Use 50BM8
25 A 21	6DL5/EL95MP	3.37	....	EL86MP	Use 6CW5	....	UL84MP	Use 45B5
25 A 21	6GW8/ECL86MP	3.43	....	....	....	25 A 21	7189MP	3.21

ARGOS SERVICEMEN'S TUBE CADDIES

IOR TUBE CADDY



50

TC-200.
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thirds
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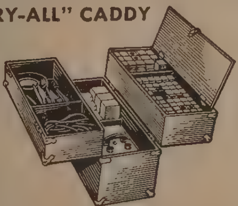
y cad-
Perfect
uick servicing trips. Holds up to 143
with room for meters and tools.
ak-open" section has cover and snap
or keeping small parts in order. Gray
covering. Clasp lock. Plastic handle.
15¾x8". Shpg. wt., 8 lbs.
9681 X 11.50

"CARRY-ALL" CADDY

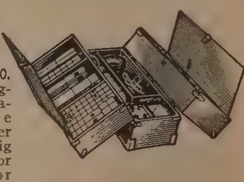


17.95

Type TC-400. One of the most popular caddies sold. Carries up to 262 tubes with room for soldering gun, meter, probes, tools, and assorted small parts. "Break-away" design permits quick access to all sections. Has two clasp locks; plastic carrying handle. Scuffproof gray vinyl covering. Size, 15x21x8". Shpg. wt., 11 lbs.

24 A 9682 X 17.95

SUPER TUBE CADDY

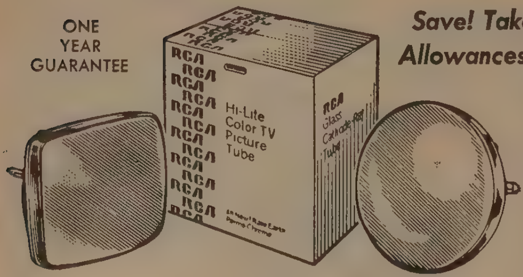


31.95

Type TC-600. Most rugged, durable tube caddy ever built. Big double door caddy for tubes, tools and parts. Saves extra trips—carries a full load of up to 325 tubes with space for test equipment. Removable 2¾"-deep small parts tray. Steel strips protect bottom and sides. Gray vinyl. 16½x24x8½". Shpg. wt., 22 lbs.

24 A 9683 X 31.95

RCA Guaranteed TV Picture Tubes


RCA
Hi-Lite Color TV Picture Tube
RCA Glass Cathode Ray Tube

ONE
YEAR
GUARANTEE

Save! Take Advantage of Allied's Generous Trade-I
Allowances by Returning Your Used Color Picture Tu

HI-LITE AND COLORAMA COLOR TUBES ARE SA
QUALITY TUBES AS USED IN BRAND-NEW SE

RCA Hi-Lite Color Tubes. All-new with advanced green and sulphide phosphors, plus rare earth red phosphor for finest c fidelity. **RCA Colorama Tubes.** Contain used materials caref inspected to meet RCA's standards. *Both guaranteed one (tube replaced at no cost if defect occurs due to workmans materials or construction).* Old tubes returned to Allied for all ance must be shipped prepaid in same carton in which tube received. Specify Dept. No. (25 A 28), "Ship." Letter, and Tube T

Colorama Picture Tubes

Ship.	Tube Type	Wt. Lbs.	Bulb Allow.	EACH
Z	C-11WP22	15	5.00	92.30
Z	C-15LP22	17	20.00	98.09
Z	C-15NP22	16	20.00	95.33
Z	C-19GVP22/19EXP22	29	25.00	112.50
Z	C-19GWP22/19EYP22	30	25.00	113.84
Z	C-19HNP22	29	25.00	155.89
Z	C-21AXP22A	45	10.00	81.37
Z	C-21CYP22A	45	10.00	74.53
Z	C-21FBP22	45	17.50	77.94
Z	C-21FJP22	54	17.50	84.78
Z	C-21GUP22/21FBP22A	46	17.50	84.28
Z	C-21GVP22/21FJP22A	54	17.50	100.50
Z	C-22JP22	42	25.00	127.10
Z	C-23EGP22A	52	15.00	189.53
Z	C-25AJP22	54	30.00	175.04
Z	C-25AP22A	52	30.00	103.25
Z	C-25BP22A	52	30.00	97.77
Z	C-25XP22/25AP22A	52	30.00	103.25
Z	C-25YP22/25BP22A	52	30.00	97.77

Hi-Lite All-New Color Picture Tubes

Ship.	Tube Type	Wt. Lbs.	Bulb Allow.	EAC
Z	**H-19GVP22** Replaces: 19EXP22; 490JB22; 490LB22	29	25.00	136.
Z	**H-19GWP22** Replaces: 19EYP22; 19FMP22; 19FXP22	30	25.00	140.
Z	**H-21GUP22** Replaces: 21AXP22,A; 21CPY22,A; 21FBP22,A	46	17.50	104.
Z	**H-21GVP22** Replaces: 21FJP22,A; 21FKP22	54	17.50	111.
Z	**H-19HNP22** Replaces: 19HNP22	29	25.00	169.
Z	**H-22KP22** Replaces: 22KP22; 22RP22	35	30.00	161.
Z	**H-22UP22** Replaces: 22UP22; 22XP22	52	30.00	185.
Z	**H-25AJP22** Replaces: 25ASP22; 25AGP22; 25AJP22; 25ADP22	48	30.00	187.
Z	**H-25XP22** Replaces: 25AP22; HR/25AP22A; RE25AP22,A; REA25AP22A; 25CP22; REA25CP22; 25GP22,A; RE25GP22; 25SP22	52	30.00	148.

RCA BLACK-AND-WHITE PICTURE TUBES

ALL TUBES GUARANTEED ONE FULL YEAR

- Premium Quality Name-Brand Tubes At Lowest Cost
- Replace Almost All Existing Types
- Each Carries Same Guarantee as All-New Picture Tube
- Most Have Aluminized Screens

Provide greater contrast, brighter picture. All parts and materials used are brand new, except for the envelope, which is carefully inspected to meet standards of the original new envelope. Where alternate tubes are indicated, the substitute is interchangeable with the original. New tube types are added to stock as soon as relea by the manufacturer. Allied provides you complete, immediate satisfaction and personal service. Types marked with* are not illumini To order: Specify Dept. No. (25 A 28), "Sh Letter, and Tube Type.

Ship.	Type	Lbs.	EACH	Ship.	Type	Lbs.	EACH	Ship.	Type	Lbs.	EACH	Ship.	Type	Lbs.	EACH
X	8DP4*	8	30.66	U	16BTP4	...	Use 16CHP4A	U	17ATP4A	...	Use 17BJP4	U	17EWP4	13	38.0
X	8XP4	8	34.66	U	16BVP4	...	Use 16CMP4A	U	17AVP4	...	Use 17BJP4	U	17FP4	...	Use 17H
X	8YP4*	8	36.39	U	16BWP4	...	Use 16BGP4	U	17AVP4/A	...	Use 17BJP4	U	17FP4A	...	Use 17H
X	9AEP4	5	21.28	U	16CP4	...	Use 16LP4A	U	17BJP4	17	24.13	U	17HP4B	...	Use 17H
X	9WP4	10	22.66	U	16CAP4	...	Use 16BGP4	U	17BP4B	...	Use 17BP4D	U	17HP4/C	16	22.5
X	10BP4C/D	...	Use 10FP4A	U	16CEP4	...	Use16CMP4A	U	17BP4D	20	22.53	U	17JP4*	...	Use 17B
X	10CP4*	...	Use 10FP4A	U	16CHP4	...	Use16CHP4A	U	17BRP4	...	Use 17DSP4	U	17KP4	...	Use 17H
X	10EP4*	...	Use 10BP4A	U	16CHP4A	22	32.10	U	17BUP4	...	Use 17BJP4	U	17KP4A	...	Use 17H
X	10FP4A	13	42.00	U	16CJP4A	...	Use16CMP4A	U	17BZP4	...	Use 17DSP4	U	17LP4A/B	16	24.1
X	11AP4	...	Use 11HP4A	U	16CMP4	...	Use16CMP4A	U	17CAP4	...	Use 17DSP4	U	17QP4A/B	14	24.1
X	11BP4	...	Use 11HP4A	U	16CMP4A	23	32.60	U	17CBP4*	...	Use 17BJP4	U	17RP4/C	...	Use 17H
X	11CP4	4	25.80	U	16CTP4	...	Use 16BGP4	U	17CDP4	14	32.61	U	17SP4	...	Use 17L
X	11HP4	..	Use 11HP4A	U	16CUP4	...	Use16CMP4A	U	17CFP4	17	24.54	U	17UP4*	...	Use 17Q
X	11HP4A	4	24.73	U	16CUP4	...	Use16CHP4A	U	17CKP4	...	Use 17DSP4	U	17VP4/B*	...	Use 17L
X	12BNP4	...	Use12BNP4A	U	16GP4B*	...	Use 16WP4A	U	17CLP4	...	Use 17BJP4	U	17YP4*	...	Use 17Q
U	12BNP4A	5	23.33	U	16KP4	...	Use16RP4B	U	17CP4*	16	28.46	Z	19ABP4	19	38.0
U	12CFP4	...	Use 12CNP4	U	16KP4/A	...	Use 16RP4B	U	17CWP4	...	Use 17DSP4	Z	19ACP4	...	Use 19C
U	12CGP4	...	Use 12BNP4A	U	16LP4A	25	20.88	U	17CYP4	17	31.39	Z	19ADP4	...	Use 19A
U	12CNP4	7	25.33	U	16QP4*	...	Use 16RP4B	U	17DAP4	13	31.40	Z	19AFP4	25	32.6
U	12DEP4	7	21.28	U	16RP4A	...	Use 16RP4B	U	17DHP4	...	Use 17EFP4	Z	19AGP4	...	Use 19A
U	12DFP4	7	30.00	U	16RP4B	22	20.66	U	17DKP4	...	Use 17DSP4	Z	19AHP4	...	Use 19A
U	16AP4A	...	Use16LP4A	U	16SP4A*	...	Use 16WP4A	U	17DLP4	...	Use 17DSP4	Z	19AJP4	19	33.3
U	16ASP4	...	Use16CMP4A	U	16TP4*	21	28.20	U	17DQP4	13	25.33	Z	19AKP4	...	Use 19A
U	16ATP4	...	Use 16CHP4A	U	16UP4*	...	Use 16RP4B	U	17DRP4	14	31.98	Z	19ANP4	...	Use 19A
U	16AXP4	...	Use16CMP4A	U	16VP4*	...	Use 16WP4A	U	17DSP4	13	26.60	Z	19ARP4	...	Use 19A
U	16AYP4	9	Use 16BQP4	U	16WP4A*	21	30.66	U	17DTP4	...	Use 17DSP4	Z	19ATP4	...	Use 19A
U	16BFP4	...	Use16CMP4A	U	16XP4*	...	Use 16RP4B	U	17DXP4	14	24.40	Z	19AUP4	...	Use 19A
U	16BGP4	22	31.85	U	16YP4*	...	Use 16WP4A	U	17DZP4	...	Use 17DXP4	Z	19AVP4	19	33.3
U	16BKP4	...	Use16CHP4A	U	16ZP4*	...	Use 16LP4A	U	17EAP4	...	Use 17HP4C	Z	19AWP4	...	Use 19A
U	16BMP4	...	Use16BGP4	U	17AP4*	...	Use 17BP4D	U	17EBP4	...	Use 17EFP4	Z	19AXP4	...	Use 19A
U	16BQP4	...	Use16CMP4A	U	17ATP4*	...	Use 17BJP4	U	17EFP4	24	24.40	Z	19AYP4	24	33.3

Listings Continued on Following P

Specify Dept. No. 25 A 28; "X," "U" or "Z" Shipment; and Tube Type

RCA Guaranteed TV Picture Tubes (Cont'd)

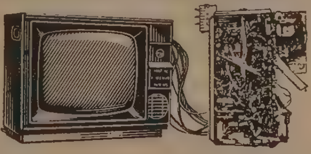
HOW TO ORDER: Specify Dept. No. 25 A 28; "X," "U," or "Z" Shipment; and Tube Type No.

Type	Lbs.	EACH	Ship.	Type	Lbs.	EACH	Ship.	Type	Lbs.	EACH	Ship.	Type	Lbs.	EACH
19AZP4	...	Use 19AVP4	Z	19GRP4	...	Use 19DQP4	Z	21EVP4	...	Use 21FDP4	Z	23ERP4	...	Use 23EKP4
19BDP4	24	33.00	Z	19GTP4	...	Use 19FEP4B	Z	21FAP4	...	Use21EMP4/	Z	23ESP4	...	Use23HFP4A
19BHP4	...	Use 19AVP4	Z	19XP4	...	Use 19AVP4				21EQP4	Z	23ETP4	41	48.26
19BLP4	...	Use 19AVP4	Z	19YP4	...	Use 19AVP4	Z	21FDP4	29	40.33	Z	23EWP4/A	...	Use 23EQP4
19BMP4	...	Use 19AFP4	Z	19ZP4	...	Use 19AVP4	Z	21FLP4	...	Use21CBP4A	Z	23EYP4	44	49.00
19BRP4	...	Use 19DRP4	Z	20CP4*	...	Use 20DP4D	Z	21FP4C	...	Use 21FP4D	Z	23EZP4	...	Use 23BKP4
19BSP4	...	Use 19AVP4	Z	20CP4A/B/C	...	Use 20DP4D	Z	21FP4D	35	28.80	Z	23FBP4	40	47.00
19BTP4	...	Use 19AVP4	Z	20CP4D		Use 20DP4D	Z	21FVP4	19	40.96	Z	23FCP4	...	Use23GJP4A
19BVP4	...	Use 19AVP4	Z	20DP4C	24	31.40	Z	21FWP4	...	Use 21FVP4	Z	23FDP4	...	Use23GJP4A
19BWP4	...	Use 19AYP4	Z	20XP4	...	Use 20TP4	Z	21FZP4	...	Use 21FVP4	Z	23FEP4	...	Use 23ENP4
19BXP4	...	Use 19AYP4	Z	20YP4	...	Use 20SP4	Z	21GAP4A	23	42.08	Z	23FHP4	...	Use23GJP4A
19CAP4	...	Use 19AVP4	Z	21ACP4/A	...	Use21AMP4B	Z	21MP4	...	Use 21YP4B	Z	23FJP4	...	Use 23ETP4
19CDP4	...	Use 19CXP4	Z	21AFP4*	...	Use 21YP4B	Z	21WP4A/B	31	29.46	Z	23FLP4	...	Use 23EKP4
19CFP4	...	Use 19CHP4	Z	21ALP4/A/B	...	Use21CBP4A	Z	21XP4A/B	33	29.46	Z	23FMP4	..	Use 23HFP4A
19CHP4	24	33.33	Z	21AMP4A/B	35	23.33	Z	21YP4A/B	32	21.60	Z	23FP4A	34	39.86
19CJP4	...	Use 19AVP4	Z	21ANP4/A	...	Use21CBP4A	Z	21ZP4B/C	33	21.60	Z	23FSP4	40	49.60
19CKP4	...	Use 19CHP4	Z	21AP4*	...	Use 21ZP4C	Z	23ACP4	...	Use 234P4	Z	23FVP4/A	...	Use23HFP4A
19CLP4	...	Use 19BDP4	Z	21AQP4/A	...	Use21AMP4B	Z	23AFP4	...	Use 23YP4	Z	23GP4	...	Use 23CP4
19CMP4	26	33.33	Z	21ASP4*	...	Use 21XP4B	Z	23AHP4	39	41.00	Z	23GBP4	...	Use23HFP4A
19CQP4	...	Use 19CXP4	Z	21ATP4/A/B	..	Use 21CBP4A	Z	23ALP4	...	Use 23CQP4	Z	23GEP4	...	Use 23ENP4
19CRP4	...	Use 19BDP4	Z	21AUP4/A/B	...	Use21AVP4C	Z	23ANP4	...	Use 23BQP4	Z	23GJP4/A	34	48.40
19CSP4	...	Use 19CHP4	Z	21AVP4B/C	24	26.33	Z	23ARP4	35	38.50	Z	23GP4	...	Use 23CP4
19CUP4	...	Use 19CMP4	Z	21AYP4*	...	Use 21XP4B	Z	23ASP4	36	41.00	Z	23GSP4	40	49.60
19CXP4	26	33.33	Z	21BAP4	...	Use21CBP4A	Z	23ATP4	...	Use 23BKP4	Z	23GTP4	...	Use 23ETP4
19CYP4	...	Use 19AVP4	Z	21BCP4	...	Use 21YP4B	Z	23AUP4	...	Use 23AHP4	Z	23GWP4	...	Use23GJP4A
19CZP4	...	Use 19DQP4	Z	21BDP4	...	Use21AVP4C	Z	23AVP4	...	Use 23CP4	Z	23GXP4	...	Use 23GSP4
19DAP4	...	Use 19DQP4	Z	21BNP4	...	Use21CBP4A	Z	23AWP4	...	Use 23BJP4	Z	23HFP4A	40	48.40
19DEP4	...	Use 19AVP4	Z	21BSP4	...	Use21AMP4B	Z	23BDP4	...	Use 23YP4	Z	23HGP4	40	49.60
19DFP4	...	Use 19CHP4	Z	21BTP4	...	Use21CBP4A	Z	23BGP4	36	44.33	Z	23HFP4	...	Use23HFP4A
19DLP4	...	Use 19CHP4	Z	21CBP4A	33	20.80	Z	23BHP4	...	Use 23BGP4	Z	23HLP4	...	Use 23GSP4
19DQP4	26	36.40	Z	21CEP4/A	...	Use21EMP4/	Z	23BJP4	35	41.00	Z	23HP4	...	Use 23CP4
19DRP4	26	36.40				21ENP4	Z	23BKP4	44	45.66	Z	23HQP4	...	Use 23HGP4
19DSP4	26	36.40	Z	21CMP4	...	Use21CBP4A	Z	23BLP4	...	Use 23BKP4	Z	23HUP4A	40	48.40
19DTP4	...	Use 19DQP4	Z	21CQP4	20	31.53	Z	23BMP4	...	Use 23YP4	Z	23HXP4	...	Use23HFP4A
19DUP4	19	36.40	Z	21CUP4	...	Use21AMP4B	Z	23BNP4	...	Use 23CP4	Z	23JEP4	36	49.53
19DWP4	...	Use 19DQP4	Z	21CVP4	...	Use21CBP4A	Z	23BQP4	40	44.33	Z	23JP4	43	44.33
19EAP4	...	Use 19FEP4B	Z	21CWP4	...	Use21CBP4A	Z	23BTP4	...	Use 23YP4	Z	23KP4A	...	Use 23FP4A
19EBP4	26	35.00	Z	21CXP4	...	Use 21DSP4	Z	23BVP4	...	Use 23YP4	Z	23MP4/A	...	Use 23FP4A
19EGP4	26	35.00	Z	21CZP4	...	Use21DEP4A	Z	23BWP4	...	Use 23YP4	Z	23NP4	40	39.86
19EJP4	...	Use 19FEP4B	Z	21DAP4	...	Use21DEP4A	Z	23BZP4	...	Use 23CGP4	Z	23TP4	...	Use 23YP4
19ELP4	...	Use 19AVP4	Z	21DEP4A	26	27.66	Z	23CBP4	35	45.00	Z	23UP4	...	Use 23BQP4
19EMP4	...	Use 19EBP4	Z	21DFP4A	...	Use21EMP4/	Z	23CGP4	40	41.00	Z	23WP4	...	Use 23FP4A
19ENP4/A	...	Use 19FEP4B				21EQP4	Z	23CP4	36	44.33	Z	23XP4	...	Use 23YP4
19EVP4	...	Use 19DQP4	Z	21DHP4	32	31.46	Z	23CP4A	...	Use 23CP4	Z	23YP4	48	45.66
19EWP4	...	Use 19DQP4	Z	21DLP4	30	25.93	Z	23CQP4	36	39.86	Z	24ADP4	...	Use 24CP4B
19EZP4	30	40.46	Z	21DMP4	...	Use21EMP4/	Z	23CZP4	...	Use 23AHP4	Z	24AEP4	46	28.96
19FBP4	...	Use 19EGP4				21EPQ4	Z	23DAP4	28	42.26	Z	24AHP4	40	41.86
19FCP4/A	...	Use 19DQP4	Z	21DNP4	..	Use 21CBP4A	Z	23DBP4,	30	39.26	Z	24ALP4	...	Use 24AHP4
19FDP4	...	Use 19DQP4	Z	21DQP4	...	Use 21DLP4	Z	23DLP4	...	Use 23ENP4	Z	24ANP4	...	Use 24AEP4
19FEP4/A/B	26	36.40	Z	21DSP4	37	27.66	Z	23DLP4A	...	Use 23ENP4	Z	24AUP4	39	35.60
19FJP4/A	...	Use 19DQP4	Z	21EAP4	...	Use 21FDP4	Z	23DNP4	...	Use 23BKP4	Z	24AVP4	...	Use 24BEP4
19FLP4	26	35.40	Z	21EDP4	...	Use21EMP4/	Z	23DQP4	...	Use 23BKP4	Z	24BEP4	36	52.46
19FSP4	...	Use19FEP4B				21EGP4	Z	23DSP4/A	...	Use 23ENP4	Z	24CP4A/B	33	29.06
19FTP4	...	Use 19FLP4	Z	21EMP4	...	Use21EMP4/	Z	23DYP4	...	Use 23ETP4	Z	24DP4/A	...	Use 24AEP4
19FWP4	...	Use 19AYP4				21EQP4	Z	23DZP4	...	Use 23EQP4	Z	24QP4*	...	Use 24CP4B
19GAP4	19	40.46	Z	21EP4B/C	35	28.80	Z	23ECP4	...	Use 23ENP4	Z	24TP4	...	Use 24CP4B
19GBP4	...	Use 19DQP4	Z	21EMP4/	29	28.86	Z	23EDP4	...	Use 23EKP4	Z	24VP4/A	...	Use 24CP4B
19GEP4	..	Use 19GEP4A		21EQP4			Z	23EHP4	...	Use 23EKP4	Z	24XP4*	...	Use 24CP4B
19GEP4A	19	34.26	Z	21ESP4	...	Use21EMP4/	Z	23EKP4	29	46.40	Z	24YP4	...	Use 24AEP4
19GFP4	..	Use 19GER4A				21EQP4	Z	23ENP4	33	45.06	Z	24ZP4	...	Use 24AEP4
19GHP4	...	Use 19DUP4	Z	21ETP4	...	Use21EMP4/	Z	23EP4	...	Use23HFP4A	Z	230RB4	...	Use 19WP4
19GJP4/A	...	Use 19DQP4				21EQP4	Z	23EQP4	40	41.80	Z	310AVB4	...	Use 12CNP4

MPORTANT: Be sure to specify dept. no. (25 A 28) shipping letter ("X", U" or "Z") and tube type no. Example: 25 A 28 Z H-15LP22. Dept. o. indicates RCA picture tube listed in 1970 Catalog No. 290. hipping letter indicates method of shipment. "X" items are shipped Parcel Post. "U" items are too large for Parcel Post and are usually shipped by Railway Express (REA). "Z" items, too heavy for Parcel Post are usually shipped by truck. Tube type no. indicates exact tube ordered.

A MARK II
OLOR TV
TEST JIG

uble-Shoot TV in
Customer's Home
ntweight for
Portability



ble-shoot TV chassis, including degaussing circuits. For RCA ectangular chassis (18″ diameter, 180 sq. in.; 20″ diameter, sq. in.; 23″ diameter, 295 sq. in.) *plus* RCA 21″ 70° round vers made within the past 10 years. Deflection yoke, blue al magnet assembly, convergence components. Size, 19x24½x .Less CRT tube (order below), speaker.

4246 U. Shpg. wt., 32 lbs.............................99.50
4247. 10J115 Extension Cables, Adapter Kit for Mark II. For
. Shpg. wt., 2 lbs.............................20.85
28 Z. 1830P22 19″ CRT for Mark II. Shpg. wt., 46 lbs....63.56

RCA MARK III
DELUXE PORTABLE
TEST JIG

- With Needed Deflection Components
- Matched Components for Accuracy
- Makes Testing Faster and Easier

Identify problems in the tube neck and components without removing chassis. For RCA 90° rectangular chassis (18″ diameter, 180 sq. in.; 20″ diameter, 227 sq. in.; 23″ diameter, 295 sq. in.) *plus* RCA 21″ 70° round receivers made in past 10 years. Deflection yoke, purity and blue lateral magnet assembly. Size, 15x17¾x17⅝″. Less CRT tube (order below).

21 A 4221 U. Shpg. wt., 16 lbs.............................99.50
21 A 4222. 10J116 Extension Cables, Adapter Kit for Mark III. For color. Shpg. wt., 2 lbs.............................19.20
25 A 28 Z. 1830P22 19″ CRT for Mark III. Wt., 40 lbs.........63.56

SEE ALLIED'S COMPLETE STOCK OF QUALITY PICTURE TUBE TESTERS

Special-Purpose High Reliability Tubes

ORDERING INFORMATION

When ordering, be sure to include the full Stock No. of each tube you need. This consists of two parts. 1. The Department No., and 2. The Tube Type No. i.e., 59 A 1 (Dept. No.) OA2, (Tube Type); thus 59 A 1-OA2.

Special-Purpose Tubes Are Available on Credit Terms . . See Page 438

Highly reliable, special-purpose tubes from famous manufacturers. Meet exacting specifications in commercial, military, Amateur, and experimental uses. Carefully made and thoroughly tested. Special high-fidelity tubes are followed by brac in table below. (Type in brackets indicates rec ing tube prototype.) All are directly intercha able; need no rewiring.

DEPARTMENT NO. KEY TO NAMES OF MANUFACTURERS

59 A 1	Radio Corporation of America	59 A 4	Ampere
59 A 2	Raytheon	59 A 12	Sylvania Electr

Stock No.		EACH
Dept.	Tube Type	
59 A 1	OA2	1.32
59 A 4	OA2	1.26
59 A 1	OA3	1.54
59 A 1	OA4G	1.86
59 A 1	OB2	1.37
59 A 4	OB2	1.32
59 A 1	OB2WA	2.40
59 A 1	OC2	1.50
59 A 1	OC3	1.50
59 A 1	OD3	1.44
59 A 2	1AD4	2.80
59 A 2	1AG4	7.30
59 A 4	1M3/DM70	2.30
59 A 1	1P39	3.45
59 A 1	1P40	5.60
59 A 1	2D21	1.29
59 A 1	2E26	3.95
59 A 1	2X2A	4.20
59 A 1	3A4	1.55
59 A 1	3A5	2.03
59 A 2	5R4GYA	2.05
59 A 1	5R4GYB	2.03
59 A 1Z	5UP1	21.10
59 A 12	5Y3WGTA	4.05
59 A 1	6AK6	1.40
59 A 2	6AN5	4.17
59 A 1	6AS6	3.43
59 A 1	6AS7G	4.93
59 A 12	6D4	3.30
59 A 1	6DJ8/ECC88	1.89
59 A 4	6DJ8/ECC88	1.89
59 A 1	6J4	4.02
59 A 1	6X4W	1.60
59 A 1	12AT7WA	2.53
59 A 4	EL34(6CA7)	2.68
59 A 4	GZ34(5AR4)	2.62
59 A 4	EL37	5.43
59 A 4	EABC80	1.88
59 A 4	ECF80(6BL8)	1.35
59 A 4	EF80(6BX6)	2.28
59 A 4	EZ80(6V4)	.75
59 A 4	ECC81(12AT7)	1.93
59 A 4	ECH81(6AJ8)	1.38
59 A 4	EZ81(6CA4)	1.23
59 A 4	ECC82(12AU7A)	1.15
59 A 1	83	1.89
59 A 4	ECC83(12AX7A)	1.25
59 A 4	EL84(6BQ5)	1.48
59 A 4	EM84(6FG6)	4.55
59 A 4	EL84MP(6BQ5)	2.58
59 A 4	ECC85(6AQ8)	1.50
59 A 4	EF85(6BY7)	1.68
59 A 4	ECL86(6GW8)	1.53
59 A 4	EF86(6267)	1.30
59 A 4	EL86(6CW5)	1.38
59 A 4	UF86	2.65
59 A 4	EBF89(6DC8)	1.53
59 A 4	EF89(6DA6)	2.10
59 A 4	90C1	2.25
59 A 4	EZ90(6X4)	.90
59 A 4	EF91	3.53
59 A 4	EF95	2.25
59 A 4	EL95(6DL5)	1.55
59 A 12	GB407A	5.90
59 A 12	GB408A	4.95
....	417A See 5842/417A	
59 A 2	512AX	4.35
59 A 2	533AX	4.40
59 A 1	807	4.20
59 A 1	811A	7.75
59 A 1	812A	7.20
59 A 1	816	4.50
59 A 1	866A	3.75
59 A 1	868	6.85
59 A 1	872A	10.70
59 A 1	884	2.28
59 A 1	922	3.75
59 A 1	923	5.50
59 A 1	925	5.95
59 A 1	926	5.75
59 A 1	927	7.15
59 A 1	929	3.65
59 A 1	930	5.60
59 A 1	931A	12.10
59 A 2	1026	5.25
59 A 1	1612	5.77
59 A 1	1614	4.93
59 A 1	1619	6.23
59 A 1	1620	7.55
59 A 1	1622	5.35
59 A 1	1625	6.30
59 A 1	1629	2.04
59 A 1	1635	4.20
59 A 1	2050	2.37
59 A 1	2050A	2.03
59 A 2	2050W	7.50
59 A 1	5557	9.50
59 A 1	5581	6.20
59 A 1	5582	7.45
59 A 1	5583	9.30
59 A 1	5642	3.53
59 A 1	5651A	1.78
59 A 1	5654	2.41
59 A 1	5663	2.20
59 A 1	5670	2.45
59 A 2	5672	2.27
59 A 2	5676	3.05
59 A 1	5678	2.30
59 A 1	5686	3.37
59 A 1	5687	4.05
59 A 1	5691	8.75
59 A 1	5692	8.25
59 A 1	5693	6.60
59 A 1	5696	1.95
59 A 2	5702	4.20
59 A 1	5718	3.65
59 A 1	5719	3.15
59 A 1	5725	3.15
59 A 1	5725/6AS6W	3.12
59 A 1	5726	1.55
59 A 1	5727	2.90
59 A 1	5749	2.20
59 A 1	5750	3.45
59 A 1	5751	2.55
59 A 2	5755	9.30
59 A 1	5763	2.45
59 A 2	5784	5.00
59 A 1	5814A	2.35
59 A 1	5823	1.72
59 A 1	5824	3.60
59 A 1	5840	5.35
59 A 1	5842/417A	7.35
59 A 4	5842	7.35
59 A 1	5844	2.40
59 A 12	5845	9.95
59 A 4	5847	9.55
59 A 1	5876A	6.90
59 A 2	CK5879	1.95
59 A 1	5881	3.10
59 A 2	5886	5.00
59 A 4	5894	29.00
59 A 1	5902	4.80
59 A 1	5915	1.62
59 A 1	5963	1.36
59 A 1	5964	1.55
59 A 1	5965	1.92
59 A 2	CK5965A	1.90
59 A 1	6005	3.23
59 A 4	6007	2.15
59 A 1	6012	7.65
59 A 1	6021	3.50
59 A 1	6072	3.90
59 A 2	CK6072A	3.88
59 A 1	6073	3.00
59 A 1	6074	3.45
59 A 1	6080	5.33
59 A 2	CK/6087/ 5Y3WGTB	5.75
59 A 2	6088	3.50
59 A 1	6111	3.70
59 A 1	6112	4.15
59 A 1	6136	2.70
59 A 1	6146A	4.30
59 A 1	6146B/8298A	5.15
59 A 1	6146W	6.60
59 A 1	6189	3.70
59 A 1	6197	2.30
59 A 1	6201	2.95
59 A 1	6202	2.69
59 A 1	6211	2.15
59 A 12	6216	4.15
59 A 2	CK6263	4.10
59 A 4	6267/EF86	1.30
59 A 1	6293	5.50
59 A 1	6350	1.85
59 A 4	6360A	6.25
59 A 1	6417	3.33
59 A 2	6418	3.20
59 A 4	6463	3.50
59 A 12	6476A	14.95
59 A 2	6485	2.05
59 A 1	6550	4.59
59 A 1	6550V1	9.25
59 A 1	6626/OA2WA	3.35
59 A 1	6661/6BH6	
59 A 1	6663/6AL5	
59 A 1	6677/6CL6	
59 A 1	6678/6U8A	
59 A 1	6679/12AT7	
59 A 1	6680/12AU7A	
59 A 4	6688A	
59 A 1	6883	
59 A 4	6922/E88CC	
59 A 4	6977	
59 A 4	7025	
59 A 1	7054	
59 A 1	7056	
59 A 1	7059	
59 A 1	7060	
59 A 1	7061	
59 A 4	7062	
59 A 4	7119	
59 A 1	7167	
59 A 4	7189	
59 A 4	7308	
59 A 1	7360	
59 A 1	7551	
59 A 1	7558	
59 A 1	7586	
59 A 1	7587	
59 A 1	7735B	17
59 A 4	7737	
59 A 4	7788	10
59 A 1	7895	
59 A 1	7898	
59 A 1	7905	
59 A 12	7963	
59 A 12	7984	
59 A 1	8008	1
59 A 1	8032	
59 A 1	8056	
59 A 1	8077/7054	
59 A 4	8228	
59 A 4	8233	16
59 A 1	8393	
59 A 1	9001	
59 A 1	9002	
59 A 1	9003	

ALLIED STOCKS A WIDE VARIETY OF HIGH-RELIABILITY AND SPECIAL-PURPOSE TUBES FOR ALL YOUR ELECTRONIC REQUIREMENTS

- Over 800 Types
- Major Manufacturers
- Immediate Shipment
- Write for Free Information

Allied keeps in stock and ready for immediate shipment over 800 types of special-purpose and high-fidelity tubes. Due to space requirements however, we can only list the most popular of these tubes in our catalog. If you need a special-purpose or high-fidelity tube type not listed, simply write Allied for prompt information. Also, everything we sell (including special-purpose tubes) is available on Credit Terms . . see page 438 for complete details and information.

Eveready Reliable Long-Life Batteries

ALKALINE ENERGIZER BATTERIES

continuous operation devices: portable TV sets, guns, etc. High amperage and constant output ng life. *Indicates rechargeable. Sizes: E90-"N"; "AA"; E92-"AAA"; E93-"C"; E95-"D". Av. wt., 10 oz.

ock lo.	Mfr's Type	V	Size	PRICE	Replaces	
					Mallory	Burgess
5440	E90	1½	15/32 dia. x 1⅛"	Pkg. of 2/.66	Mn1900	AL-N
5426	E91BP-4	1½	9/16 dia. x 1 31/32"	Pkg. of 4/1.57	Mn1500	AL-9
5348	E92	1½	13/32 dia. x 1 47/64"	.39 ea.	Mn2400	AL-7
5347	E93BP-2	1½	1 1/32 dia. x 1 15/16"	Pkg. of 2/.99	Mn1400	AL-1
5993	E94	1½	1 11/32x1 7/32"	.52 ea.	.. .	. . . .
5346	E95BP-2	1½	1 11/32 dia. x 2 13/32"	Pkg. of 2/1.27	Mn1300	AL-2
5856	E177	9	35/64 dia. x 1 25/32"	1.48 ea.	TR-177	H-177
5996	523	4½	21/32 dia. x 1 31/32"	1.00 ea.	PX-21	AL-133
5997	531	4½	⅝ dia. x 2 19/64"	1.00 ea.	PX-19	....
5857	*560	7½	2 21/32x1 17/32x7 5/32"	4.62 ea.	.. .	
5858	*561	15	8 5/16x2 13/16x5⅞"	10.62 ea.	....	....
5859	*563	4½	12 3/64 dia. x 7 5/32"	2.76 ea.	....	....
5043	*564	4	8 5/16x2 13/16x5⅞"	9.94 ea.	....	....
5848	596	1½	8 15/16x2 13/16x5⅞"	1.20 ea.	....	

PHOTOFLASH BATTERIES

current for synchronization of solenoid shutter and Type 467 is for slave units. 460K, 482, 489, 491, 493, 497, and 726: electronic repeating flash. 411, 413, and 505: B-C units. 815, 835, and 850: cylindrical 815-"AA"; 835-"C"; 850-"D".

ock o.	Mfr's Type	Volts	Size	Shpg. Wt.	PRICE	Replaces Burgess
5608	411	15	1 1/32x⅝x1 29/32"	2 oz.	1.00 ea.	U10
5610	413	30	1 1/32x⅝x2 9/16"	2 oz.	1.30 ea.	U20
5605	457	67½	2 11/16x1 5/16x2¼"	3 lb.	2.70 ea.	K45
5272	460K	45	1 57/64x1⅜x2 11/32"	¾ lb.	1.97 ea.	47P
5614	467	67½	2 13/16x1⅜x3 5/64"	¾ lb.	2.70 ea.	XX45
5605	482	45	3 19/32x1 27/32x5½"	2 lbs.	2.97 ea.	M30
5613	489	225	4 11/32x2 11/16x4 3/16"	2½ lbs.	6.96 ea.	XX150
5607	490	90	3 23/32x1⅜x3 45/64"	1 lb.	3.15 ea.	V60
5609	491	240	2 19/32x1 5/16x4½"	¾ lb.	6.26 ea.	U160
5606	492	225	3 9/16x2 29/32x4 29/32"	2½ lbs.	8.35 ea.	N150
5611	493	300	2 11/16x2 7/32x3 29/32"	1 lb.	9.07 ea.	U200
5612	497	510	3x1 19/32x5⅝"	1½ lbs.	11.87 ea.	U320
5615	504	15	⅝x1 9/32x1⅜"	1 oz.	1.00 ea.	Y10
5616	505	22½	⅝x1 9/32x1 45/64"	1 oz.	1.17 ea.	Y15
5603	726	4½	4 3/32x1 7/16x2 15/16"	¾ lb.	1.23 ea.	D3
5161	812BP	1½	13/32x1¾"	½ lb.	2/.33	.. . . . .
5602	815BP	1½	9/16 dia. x 1 31/32"	½ lb.	Pkg. of 2/.33	920
5600	835BP	1½	1 1/32 dia. x 1 15/16"	½ lb.	Pkg. of 2/.39	120
5349	850	1½	1 11/32 dia. x 2 13/32"	¾ lb.	.19 ea.	220
5053	EPX 825BP-2	1.5	29/32x1 5/64"	1 oz.	Pkg. of 2/.67	PX825

1¼-VOLT NICKEL CADMIUM BATTERIES

argeable storage batteries sealed in steel. All pressure contacts except "T," indicates ered lug terminals. Sizes: N46-"AA"; N54- N57-"D". †10 hr. discharge rate in ampere s. B in Type No. indicates button cell; C, drical. Av. shpg. wt., 3 oz.

ock o.	Mfr's Type		Size	† AH	Replaces Burgess	EACH
	New	Old				
5617	B20	N22	29/64x7/32"	.2	CD1	1.16
5618	B50	N24	39/64x15/64"	.5	CD2	.88
5628	B100T	N26T	63/64x¼"	1.0	CD8L	1.08
5619	B150	N28	63/64x9/32"	1.5	CD3	.97
5623	B225	N32	63/64x11/32"	2.25	CD4	1.00
5624	B225T	N32T	63/64x⅜"	2.25	CD4L	1.16
5031	BH225	N33	1x23/64"	2.25	....	1.13
5625	B450	N36	1 45/64x1 9/32"	4.5	CD5	1.51
5626	B450T	N36T	1 11/32x9/32	4.5	CD5L	1.64
5032	BH500	N38	1 23/64x25/64"	5.0	....	1.82
5636	CH500	N46	9/16x1 61/64"	5.0	CD6	1.95
5630	CH500T	N45T	9/16x2 9/32"	4.5	CD6L	2.24
5633	C900	N52	35/64x3 11/16"	9.0	CD9	3.09
5637	CH750T	N53T	⅞x1 43/64"	7.5	CD12	2.21
5162	CH1.5	N54	1.031x1.969"	1.5	....	4.52
5634	CH4	N57	1 19/64x2 27/64"	4.0	CD10	6.30
5635	CH4T	N57T	1 19/64x2 49/64"	4.0	CD10L	6.43

LONG-LIFE TRANSISTOR BATTERIES

216

222

1035

1050

Provide distortion-free tonal quality and steady full-charge power. Fit most transistor radios, flashlights, etc. *Indicates flat contacts (206 has recessed negative); †regular snap-type contacts; ‡miniature snap-type contacts. No. 222BP is a long-life battery, similar to 216, but premium quality. Av. shpg. wt., 4 oz.

Stock No.	Mfr's Type	Volts	Size	Replaces Burgess	PRICE
18 A 5150	206BP*	9	2x¾"	L6	.63
18 A 5151	216BP‡	9	1 1/32x2 1/32x1 29/32"	2U6	.49
18 A 5152	222BP‡	9	1 1/32x2 1/32x1 29/32"	2MN6	.65
18 A 5153	226BP†	9	1x1 15/16"	P6	.69
18 A 5154	246‡	9	1 13/32x1 11/32x2¾"	2N6	1.36
18 A 5155	266†	9	1 13/16x1 13/16x2 7/16"	M6	1.36
18 A 5156	276†	9	2 9/16x2 1/32x3 5/32"	D6	1.57
18 A 5157	333BP*	4½	2 1/32x1 31/32"	....	.69
18 A 5158	1015BP	1½	9/16x1 31/32"	930	4/.64
18 A 5159	1035BP*	1½	1 1/32x1 15/16"	130	2/.39
18 A 5160	1050BP*	1½	1 11/32x2 13/32"	230	2/.39

TOP-QUALITY ZINC/CARBON FLASHLIGHT BATTERIES

Zinc/carbon batteries, sealed to provide protection in handling and against corrosive leakage. Fit all popular size flashlights. Type 935-"C" is for baby tubular flashlights. 950-"D"; 1150-"D": standard duty flashlights. 1150 is a heavy-duty battery for extra long life. 915-"AA": standard penlights. 912-"AAA": slim penlights. 904 is for miniature and novelty lights. Av. shpg. wt., 10 oz. per pkg.

912

915

950

935

Stock No.	Mfr's Type	PRICE	Size (L x Dia.)	Replaces	
				Burgess	Ray-O-Vac
18 A 5082	904	Pkg. of 6 for .57	1 11/16x7/16"	N	716
18 A 5080	912BP-2	Pkg. of 2 for .26	1¾x13/32"	7	400
18 A 5083	915BP-2	Pkg. of 2 for .27	1 31/32x35/64"	Z	7R
18 A 5078	935-2	Pkg. of 2 for .33	1 15/16x63/64"	1	1LP
18 A 5079	950-4	Pkg. of 4 for .65	2⅜x1 21/64"	2	2LP
18 A 5081	1150	Pkg. of 4 for .67	2⅜x1 21/64"	210	3LP

LANTERN BATTERIES

Specially designed for use with railroad type lanterns. Type 509 has positive coil-spring contacts. Others have binding posts. Type 732 features pressurized construction for underwater use. All are 6-volt batteries, *except 732 which is 12-volt.

509

731

Stock No.	Mfr's Type	EACH	Size	Wt., Lbs.	Replaces	
					Burgess	Ray-O-Vac
18 A 5084	509	.99	2⅝x2⅝x4⅜"	1½	F4M	941
18 A 5085	510S	.99	2⅝x2⅝x4"	1½	F4BP	941SC
18 A 5086	510F	1.06	2⅝x2⅝x4½"	1¼	F45C	941C
18 A 5087	731	2.15	5⅜x2⅞x4 15/16"	3¼	TW1	918
18 A 5088	732*	2.33	5⅜x2⅞x4 15/16"	3¼	TW1S	....

HEARING AID AND ELECTRONIC BATTERIES

Button-type batteries for hearing aids, small electronic watches and as accurate reference voltage sources. Provides higher voltage and greater milliwatt-hour* ratings. All are 1½ volts. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	Ht. x Dia.	*mW Hour	PKG. OF 6
18 A 5344	S41	.455x.165"	105	1.80
18 A 5345	S76	.455x.200"	165	1.98
18 A 5427	E675	.455x.205"	180	1.92
18 A 5428	S312	.310x.140"	30	1.62
18 A 5429	S13	.310x.210"	60	1.80

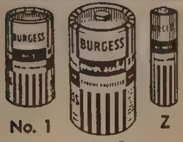
EVEREADY BATTERY MANUAL

Revised edition answers every conceivable question concerning each Eveready battery in production. Numerous charts, graphs, tables. Dimensions, drain data, weights. Over 700 pages. Overall size, 5½x8½". Shpg. wt., 1½ lbs.

23 A 7200 E. 6.00

Burgess Quality-Engineered Batteries

FLASHLIGHT AND GENERAL-PURPOSE BATTERIES

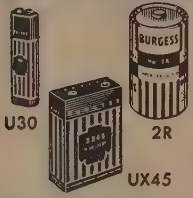


Stock No.	Mfr's Type	PRICE	Volts	Size	Wt., Oz.	Replaces: Eveready	Ray-O-Vac	RCA	NE
18 A 5779	2	Pkg. of 2 for .33	1½	2 3/8x1 21/64″ dia. (D)	10	950	2D	VS036	13
18 A 5781	210	Pkg. of 2 for .34	1½	2 3/8x1 21/64″ dia. (D)	10	1050	3D	......	13
18 A 5865	1	Pkg. of 2 for .33	1½	1 15/16x63/64″ dia. (C)	10	935	1C	VS035A	14
18 A 5870	Z	Pkg. of 2 for .20	1½	1 31/32x35/64″ dia. (AA)	10	515	7R	VS034A	15
18 A 5047	910	Pkg. of 2 for .27	1½	1 31/32x35/64″ dia. (AA)	10	415	7AA	VS034A	15
18 A 5855	7	Pkg. of 2 for .27	1½	1¾x13/32″ dia. (AAA)	10	912	4DO	VS074	24

SPECIAL LONG-LASTING ALKALINE BATTERIES

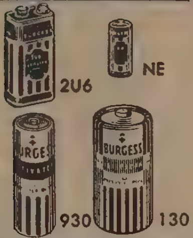
Stock No.	Mfr's Type	PRICE	Volts	Size	Wt., Oz.	Eveready	Ray-O-Vac	RCA	NE
18 A 5872	AL-2	.63 ea.	1½	2 13/32x1 21/64″ dia.	10	E95	MN-1300	VS1336	13
18 A 5873	AL-1	.49 ea.	1½	1 15/16x63/64″ dia.	10	E93	MN-1400	VS1335	14
18 A 5874	AL-9	Pkg. of 2 for .79	1½	1 31/32x1 7/32″ dia.	10	E91	MN-1500	VS1334	15
18 A 5646	AL-7	Pkg. of 2 for .79	1½	1¾x13/32″ dia.	10	E92	MN-2400	VS1074	24

PORTABLE RADIO BATTERIES



Stock No.	Mfr's Type	PRICE	Volts	Size	Wt., Lbs.	Replaces: Eveready	Ray-O-Vac	RCA	NE
18 A 5782	2R	.17 ea.	1½	2 25/64x1 21/64″ dia.	½	1050	2LP	VS336	13
18 A 5041	B5	2.27 ea.	7½	3 29/32x7/8x2 27/32″	½	713	8	VS129	8
18 A 5044	C5	1.23 ea.	7½	2 7/32x1 15/16x3 1/32″	¾	717	9	VS065	9
18 A 5592	F3	1.65 ea.	4½	4x1 7/16x4⅛″	1¼	736	A3	VS067	3
18 A 5593	Z4	.87 ea.	6	1 3/16x1 3/16x2 7/32″	¼	724	A2	VS068	2
18 A 5570	A30	3.46 ea.	45	3 9/16x2¼x4 5/16″	1¾	W359	206	VS014	20
18 A 5571	B30	5.40 ea.	45	4 1/16x2 17/32x5 5/16″	2¼	484	207	VS012	20
18 A 5669	N60X	6.50 ea.	90	1⅞x1 11/32x7⅛″	1⅛	495	....	VS316	21
18 A 5645	P45	2.70 ea.	67½	1 29/32x1x5 9/32″	¾	477	211P	VS218	21
18 A 5651	P60	2.97 ea.	90	1 29/32x1x7 13/32″	1	479	214	VS219	21
18 A 5649	U30	1.75 ea.	45	1 3/32x1 9/32x3 17/32″	¼	415	213	VS086	21
18 A 5668	UX45	2.07 ea.	67½	1 7/32x3 1/32x3 31/32″	½	416	217	VS318	21
18 A 5586	XX50	5.50 ea.	75	1 27/32x1 5/16x6 5/16″	1	437	212	VS217	21
18 A 5581	XX69	4.86 ea.	103½	1 11/32x1 11/32x11 23/32″	1	W361	227	....	22
18 A 5572	Z30	4.95 ea.	45	3x2 5/16x4 1/16″	1½	738	205	VS015	20

BATTERIES FOR TRANSISTOR CIRCUITS



Stock No.	Mfr's Type	PRICE	Volts	Size	Wt., Lbs.	Replaces: Eveready	Ray-O-Vac	RCA	NE
18 A 5769	2MN6	.65 ea.	9	1x39/64x1⅞″	⅛	222	....	......	1604
18 A 5661	2N6	1.30 ea.	9	2¾x1⅜x1⅜″	¼	246	1602	VS305	1602
18 A 5650	2U6	.48 ea.	9	1x39/64x1⅞″	¼	216	1604	VS323	1604
18 A 5861	130	Pkg. of 2 for .39	1½	1 15/16x63/64″ dia.	½	1035	14	VS335	14
18 A 5862	230	Pkg. of 2 for .39	1½	2 25/64x1 21/64″ dia.	½	1050	13	VS336	13
18 A 5863	930	Pkg. of 4 for .64	1½	1 31/32x35/64″ dia.	½	1015	15	VS334	15
18 A 5666	A4	2.48 ea.	6	1 9/32x1 9/32x2 11/32″	¼	....	....	....	.....
18 A 5670	C6X	1.64 ea.	9	2 5/16x1 1/32x6 1/16″	¾	2356N	....	VS330	1612
18 A 5098	D5	2.00 ea.	7½	2 9/16x2x2 23/32″	@	707	26	VS315	26
18 A 5652	D6	1.57 ea.	9	2 9/16x2x3 5/32″	1	276	1603	VS306	1603
18 A 5667	D6PI	4.20 ea.	3, 6, 9	2 19/32x1 7/16x7 27/32″	1½	2506	1601	VS301	1601
18 A 5174	L6	.62 ea.	9	1 31/32x47/64″ dia.	⅛	206	....	VS327	1611
18 A 5102	M6	1.36 ea.	9	1 13/16x1 13/16x2 7/16″	½	266	1605	VS322	1605
18 A 5864	NE	Pkg. of 6 for .57	1½	1 11/64x7/16″ dia.	1½	904	716	VS073	910
18 A 5093	P6	.68 ea.	9	1 15/16x1″ dia.	¼	226	1600	VS300A	1600
18 A 5770	PM6	.80 ea.	9	1 15/16x1″ dia.	¼	....	....	....	1600
18 A 5657	XX9	1.77 ea.	9, 13½	1 9/32x29/32x2 17/32″	¼	239	1900	VS304	1900
18 A 5364	Y6	.83 ea.	9	3/5x3/5x1 9/10″	⅛	....	1606	....	1606

BURGESS DRY BATTERIES

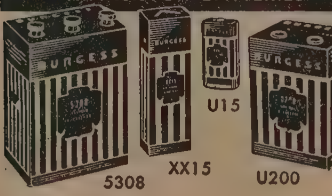
Long-life batteries for radio and hobby uses. Made to high standards and fully inspected to insure quality. Type numbers ending with letters "PI" indicate plug-in type terminals; type numbers ending with "SC" have spring clip terminals; "BP" have binding post terminals.

Stock No.	Mfr's Type	Batt. Type	EACH	Volts	Size	Wt., Lbs.
18 A 5001	2F	A	1.22	1½	2 19/32x1⅜x4¼″	¾
18 A 5010	2F2H	A	1.92	3	2⅝x2⅝x4 1/16″	1½
18 A 5003	4F	A	1.15	1½	2⅝x2⅝x4 3/32″	1½
18 A 5115	4FH	A	.99	1½	2⅝x2⅝x4″	1½
18 A 5034	422	A	.79	3	1 11/32x2 3/32x2 5/16″	¼
18 A 5026	432	A	2.90	4½	1 31/32x2 1/32x2¼″	¼
18 A 5091	532	A	1.36	4½	2 15/32x1 3/16x2 23/32″	¼
18 A 5046	8R	A	1.85	1½	3 15/16x1 3/32″ dia.	¼
18 A 5011	F2BP	A	1.33	3	2 21/32x1⅜x4 1/32″	1

BURGESS DRY BATTERIES (Cont'd)

Stock No.	Mfr's Type	Batt. Type	EACH	Volts	Size	W L
18 A 5009	F4BP	A	.99	6	2⅝x2⅝x4″	1
18 A 5557	10308SC	B	7.66	45	8 1/32x4 1/32x7 3/16″	12
18 A 5555	21308SC	B	8.25	45	8⅛x4 15/32x7 9/32″	13
18 A 5558	2308SC	B	7.66	45	8 3/32x2 31/32x7¼″	7
18 A 5560	4156	B	1.61	22½	3 17/32x2⅛x2 29/32″	1
18 A 5561	5156PI	B	4.16	22½	4 7/64x2⅜x2 55/64″	1
18 A 5562	5156SC	B	4.16	22½	4⅛x2½x2¾″	1
18 A 5559	5308	B	3.05	45	4 1/16x2 9/16x5⅛″	2
18 A 5569	Z30NX	B	2.69	45	3 1/32x1⅞x4 19/32″	1
18 A 5772	V45	B	2.77	67½	2¾x1 11/32x3 43/64″	1
18 A 5597	V60	B	3.15	90	3 23/32x1 9/32x3 11/16″	1
18 A 5583	2370	C	2.10	4½	3 15/16x1⅜x2⅞″	
18 A 5565	5360	C	1.23	4½	2 13/32x2 7/32x2 21/32″	
18 A 5564	5540	C	1.80	7½	4x⅞x2¾″	
18 A 5568	W5BP	C	5.80	7½	2 31/32x2 3/32x1¾″	

INDUSTRIAL AND TRANSISTOR BATTERIES



Stock No.	Mfr's Type	PRICE	Volts	Size	Shpg. Wt., Oz.	Replaces: Ever-eady	Ray-O-Vac	RCA	NEC
18 A 5054	XX15	2.10 ea.	22½	1 11/32x1 5/16x3⅞″	4	425P	PN15	.....	....
18 A 5060	XX30PI	2.84 ea.	45	2 17/32x3 1/32x4 1/32″	12	455P	PN30F	.....	....
18 A 5104	K-10	1.57 ea.	15	1¼x⅞x1 17/32″	2	417	......	......	22
18 A 5105	K-15	1.65 ea.	22½	1¼x⅞x2 9/32″	2	420	.....	....	22
18 A 5064	U15	1.17 ea.	22½	1x39/64x1 31/32″	2	412	215	VSO84	21
18 A 5068	Y20	1.75 ea.	30	1 3/16x19/32x1 13/32″	3	506	....	....	22
18 A 5077	Y20S	1.30 ea.	30	19/32x19/32x2 9/16″	3	507	....	....	22
18 A 5066	U20	1.30 ea.	30	1x39/64x2 17/32″	2	413	A210	VSO85	21
18 A 5594	U200	9.07 ea.	300	2¾x2 9/32x3⅞″	16	493	722	VSO93	72
18 A 5660	U320.	13.00ea.	510	2 15/16x1 17/32x5 7/16″	24	497	....	....	....
18 A 5559	5308	3.05 ea.	45	4 1/16x2 9/16x5⅛″	48	762S	709	VS112	70

Mallory "Duracell" Mercury Batteries

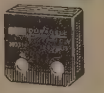
ury batteries provide more power per unit of e than any other type. Voltage stability is excellent hroughout long operating life, and shelf storage outstanding. Actually cost less per listening hour than other batteries in most transistor radios. "T" suffix indicates ½" tab on negative terminal; "T2" suffix indicates tabs on both ends. * Indicates capacity in milliampere hours. † With snap terminals.

ck o.	Mfr's Type	Price	Volts	mAH*	Use	Dia. x Ht. or HWD	Replaces	
							Eveready	Burgess
5326	303314	10.70 each	16.8	2400	Two-Way Radio	1 1/4x2 1/4	E303314	303314
5327	PX-825	.33 each	1.5	300	Camera	.900x.221	EPX825	....
5921	RM1	Pkg. of 2 for 1.24	1.4	1000	Electronic	5/8x2 1/32"	E1	HG1
5922	RM1R	Pkg. of 2 for 1.38	1.35	1000	Electronic	5/8x2 1/32"	E1N	HG1R
5800	RM1RT	Pkg. of 2 for 1.48	1.35	1000	Electronic	5/8x2 1/32"	....	....
5924	RM3R	Pkg. of 2 for 2.16	1.35	2200	Electronic	1x2 1/32"	E3	HG3
5925	RM4R	Pkg. of 2 for 2.94	1.35	3400	Electronic	1 1/5x2 1/32"	E4	HG4R
5926	RM4RT	Pkg. of 2 for 3.04	1.35	3400	Electronic	1 1/5x2 1/32"	....	....
5927	RM4Z	Pkg. of 2 for 2.00	1.4	2400	Electronic	1 1/5x1/2"	....	....
5929	RM12R	Pkg. of 2 for 2.16	1.35	3600	Electronic	5/8x1 61/64"	E12N	HG12R
5930	RM12RT	Pkg. of 2 for 2.26	1.35	3600	Electronic	5/8x1 61/64"	....	....
5931	RM12RT2	Pkg. of 2 for 2.36	1.35	3600	Electronic	5/8x1 61/64"	....	....
5981	RM41	Pkg. of 6 for 1.62	1.4	1005	Electronic	0.16x0.46"	....	....
5687	RM42R	3.30 each	1.35	14000	Electronic	1 1/5x2 3/8"	E42N	HG42R
5375	RM42RT2	3.40 each	1.35	14000	Electronic	1 1/5x2 3/8"	....	....
5950	RM312	Pkg. of 2 for .48	1.4	36	Electronic	5/16x9/64"	E312	HG312
5125	RM400	.33 each	1.4	75	Hearing Aid	.450x.130	E400	HG400
5890	RM401	Pkg. of 2 for 1.12	1.4	800	Electronic	29/64x1 1/8"	E401	HG401
5967	RM401R	Pkg. of 2 for 1.26	1.35	800	Electronic	29/64x1 1/8"	E401N	HG401R
5953	RM412	Pkg. of 2 for 5.52	22.4	160	Electronic	1x1 19/32x1 31/32"	....	....
5954	†RM413	Pkg. of 2 for 6.92	28.0	160	Electronic	1x1 19/32x2 1/2"	....	....
5955	†RM415	Pkg. of 2 for 10.20	42.0	160	Electronic	1x1 19/32x3 1/2"	....	....
5957	RM502R	Pkg. of 2 for 2.00	1.35	2400	Electronic	1/2x1 31/32"	E502	HG502R
5127	RM520	.17 each	1.4	130	Hearing Aid	.426x.385	E520	HG520
5969	RM625	Pkg. of 2 for .84	1.4	250	Electronic	5/8x1/4"	E625	HG625
5961	RM625R	Pkg. of 2 for 1.12	1.35	250	Electronic	5/8x1/4"	E625	HG625R
5959	RM625RT2	Pkg. of 2 for 1.32	1.35	250	Electronic	5/8x1/4"	....	....
5892	RM640	Pkg. of 2 for .86	1.4	500	Electronic	5/8x7/16"	E640	HG640
5971	RM640R	Pkg. of 2 for 1.12	1.35	500	Electronic	5/8x7/16"	E640N	HG640R
5899	RM675	Pkg. of 6 for 1.92	1.4	160	Electronic	29/64x1 3/64"	E675	HG675
5804	TR112	Pkg. of 2 for 3.14	2.8	350	Electronic	21/32x1 9/64"	....	....
5893	TR113R	Pkg. of 2 for 3.60	4.05	250	Electronic	21/32x53/64"	E113	H113R
5972	TR115	Pkg. of 2 for 4.28	7	350	Dictating	21/32x1 5/16"	E115	....
5896	TR115R	Pkg. of 2 for 4.28	6.75	250	Electronic	21/32x1 5/16"	E115N	....
5118	TR-118	2.80 each	10.8	250	Medical	2.014x.656	....	....
5891	TR126	Pkg. of 2 for 2.96	8.4	600	Radio	3/4x2"	E126	H126
5973	TR132	Pkg. of 2 for 2.30	2.8	1000	Paging	21/32x1 5/16"	E132	....
5898	TR132R	Pkg. of 2 for 2.54	2.7	1000	Electronic	21/32x1 5/16"	E132N	H132R
5883	TR133	Pkg. of 2 for 2.96	4.2	1000	Radio/Pag.	21/32x2"	E133	H133
5932	TR133R	Pkg. of 2 for 2.94	4.05	1000	Radio/Pag.	21/32x2"	E1133N	H133R
5933	TR134R	Pkg. of 2 for 3.66	5.4	1000	Electronic	21/32x2 9/64"	E134N	H134R
5934	TR135R	Pkg. of 2 for 4.28	6.75	1000	Electronic	21/32x3 1/4"	E135N	H135R
5978	TR136	Pkg. of 2 for 4.54	8.4	1000	Electronic	21/32x3 29/32"	E136	....
5935	TR136R	Pkg. of 2 for 4.94	8.1	1000	Electronic	21/32x3 29/32"	E136N	H136R
5985	TR137R	Pkg. of 2 for 5.60	9.45	1000	Electronic	21/32x4 9/16"	E137R	H137R
5884	†TR146X	Pkg. of 2 for 2.64	8.4	585	Radio	1x21/32x1 23/32"	E146	H146
5986	TR152	Pkg. of 2 for 1.74	2.8	350	Electronic	15/32x1 1/8"	E152	....
5940	TR163	Pkg. of 2 for 2.96	4.2	500	TV Tuner	21/32x1 5/16"	E163	H163
5885	TR164	Pkg. of 2 for 2.96	5.6	500	Radio	21/32x1 3/4"	E164	H164
5988	TR164R	Pkg. of 2 for 3.30	5.4	500	Electronic	21/32x1 3/4"	E164N	H164R
5941	TR165	Pkg. of 2 for 3.66	7.0	500	TV Tuner	21/32x2 3/16"	E165	H165
5812	TR165R	Pkg. of 2 for 3.90	6.75	500	Electronic	21/32x2 3/16"	....	....
5942	TR169	Pkg. of 2 for 6.92	12.6	500	Electronic	21/32x3 7/8"	E169	....
5117	TR-175	1.15 each	7.0	160	Turner Mike	1.031x.500	E175	....
5887	†TR177	Pkg. of 2 for 2.96	9.8	160	Radio	35/64x1 29/32"	E177	H177
5888	TR233	Pkg. of 2 for 5.20	4.2	2200	Radio	1 1/64x1 31/32"	E233	H233
5360	TR234R	3.13 each	5.6	2200	Electronic	1 1/64x1 31/32"	E234	....
5943	TR235R	Pkg. of 2 for 7.56	6.75	2200	Electronic	1 1/64x2 19/32"	E235N	....
5991	TR236R	Pkg. of 2 for 8.58	8.1	2200	Electronic	1 1/64x3 1/4"	E236N	....
5889	†TR286	Pkg. of 2 for 2.96	8.4	750	Radio	1 1/64x3 7/32"	E286	....
5944	†TR289	Pkg. of 2 for 5.60	12.6	750	CB Radio	1 1/2x2 3/32"	HG9	....
5813	†TR431	Pkg. of 2 for 5.60	10.7	1000	Dictation	1x2 7/8"	....	....
5881	ZM98	Pkg. of 2 for 1.33	1.4	2400	Radio	1/2x3 1/32"	E9	HG9
5814	ZM12	1.15 each	1.4	3600	Clock	5/8x2"	....	....

ALKAINE DURACELL BATTERIES (‡Capacity, mAH)

5128	MN1300	.63 each	1.5	10,000‡	All-Purpose "D"	D	....	....
5130	MN1400	.49 each	1.5	5000‡	All-Purpose "C"	C	....	....
5131	MN1500B2	Pkg. of 2 for .79	1.5	1800‡	All-Purpose "AA"	AA	....	....
5132	MN1604	1.00 each	9.0	190‡	Transistor Radio	....	....	....
5133	MN2400B2	Pkg. of 2 for .79	1.5	750‡	All-Purpose "AAA"	AAA	....	....
5134	MN9100B2	Pkg. of 2 for .67	1.5	580‡	All-Purpose "N"	N	....	....

PX-825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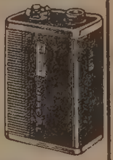

TR146X

RM640

TR133

RM625

ZM9

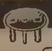
RM412

MN1300

CINCH-JONES BATTERY PLUGS

ity plugs for "A", "B" and various other battery types. ufactured to high standards for dependable long-term service. shpg. wt. per package, 1 oz. 2 per package.

k No.	Type	Fig.	For Burgess Battery	For Eveready	PKG/2
5178	5A1	...	2F, 4F, 6F, 8F, 2D, 8R	720, 960P	.16
5180	5A5	A	B5, C5, J5	717	.23
5176	5B1A	...	XX15, XX22, XX30P1	425P, 433P	.16
5310	5B2-1	.	A30, B30, M30, W30P1, Z30, 10308P1	W-359	.19
5181	5AB2	.	2TXX40		.16
5177	5AB1-1		6TA60, 4TZ60	729, W369	.23
5301	5M	B	P6, D5, P6M, M6 XX45, XX30, XX50,	226, 707, 467, 266,	.11
5302	5F	C	K45, P45, P45M, P60, D6, 4D4, N60X, C6X	455, 477, 457, 437, 495	.11
5175	5A4	D	2F4, F4P1, XX15, XX22, XX30P1	....	.16
5184	5D	E	U30, 2U6, 2N6, UX45	415, 216, E146	1.39
5307	5D1	F	XX50, P45, P45M, P60, N60X, C6X	477, 479	1.01
5309	5MFA	F	XX45, XX30, K45	457	.83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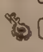
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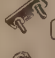
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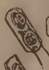
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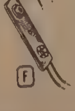

F

ALLIED 9-V TRANSISTOR RADIO BATTERY

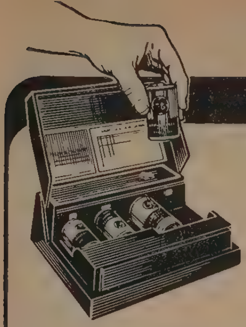
2 for 59¢

For direct replacement in many transistor radios. Made by a famous American manufacturer, yet sell at imported-battery prices. Rigid manufacturing procedures and quality control standards assure long life. Replace: Burgess 2U6; RCA VS323; Eveready 216, Sears 6417, and many others.
18 A 5980. Wt., 6 oz. ....Pkg. of 2 for .59

Allied keeps in stock and ready for immediate shipment a wide variety of high-quality batteries. If you need a battery not listed, Allied can supply it. Simply contact Allied for information.

Lanterns, Lights and Batteries

G.E. PERMACELL NICKEL-CADMIUM BATTERY SYSTEM



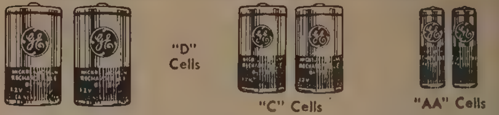
MODEL BC-1 BATTERY CHARGER

7.49

- Charges 2 or 4 same-size Batteries
- Fast and Automatic

Brings your batteries to peak performance in just 15 hours. Automatic operation. Positive, spring-loaded terminals for sure connections. Charges 2 or 4 of the same-size batteries (order at right) or any two pairs simultaneously. 7⅛x5½x2½". 110-120 VAC.
18 A 5238. Shpg. wt., 3 lbs....................7.49

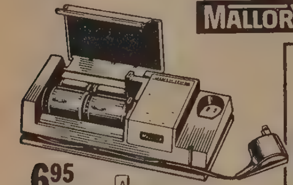
RECHARGEABLE NICKEL-CADMIUM BATTERIES



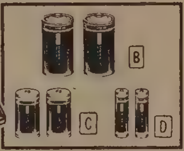
Eliminate constant replacing of dead or weak batteries in toys, tape recorder, transistor radios, flash equipment, other electronic devices. Recharge up to 1000 times or more with BC-1 Battery Charger left (not recommended for other chargers). Rugged, sealed construction, uniform power output. Available in sizes AA, C, or D.

Stock No.	Mfr's Type	Volts	Ampere Hours	Size	PRICE
18 A 5237	GC-3	1.2	1.0	D	Pkg. of 2 for 2.79
18 A 5236	GC-2	1.2	1.0	C	Pkg. of 2 for 2.79
18 A 5235	GC-1	1.2	1.0	AA	Pkg. of 2 for 2.49

MALLORY MODEL BC-15 CHARGER AND RECHARGEABLE ALKALINE BATTERIES



6.95



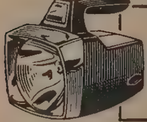
A BC-15 CHARGER. For batteries SA-13D, SA-14C and SA-15AA (order at right). Charges two or four of the same size batteries, or any two pairs simultaneously. Positive, automatic operation. Brings batteries to top charge in 24 hours. Built-in AC line cord. Size, 9¾x4¾x2¾". For 110-130 VAC.
18 A 5239. Wt., 1 lb.........6.95

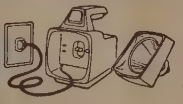
B SA-13D. 1.5 volt battery. 20 milliamp-hour cap. 1.3x2.367"
18 A 5815. Wt., 5 oz.........1.

C SA-14C. 1.5 volts. 1000 mil amp-hour cap. 1.01x1.94".
18 A 5816. Wt., 2½ oz.........

D SA-15AA. 1.5 volts. 300 mil amp-hour cap. 0.55x1.94".
18 A 5817. Wt., 1 oz.........

EVEREADY RECHARGEABLE LANTERN

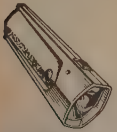




Peak performance is restored after overnight recharge from any AC outlet.

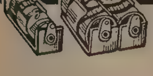
THE "COMMANDER." Low-cost, top-quality lantern provides bright steady beam for up to one and three-quarter hours without recharging. Never needs batteries, contains extra long-life rechargeable nickel-cadmium batteries and self-contained line cord for easy recharging. Recharges to peak performance after overnight charge from AC line. Holds charge, when not in use, for over a year—it's always ready for instant use. Easy to hold cantilever handle with convenient thumbtip pushbutton control. Rugged high-impact body, chrome trim. 3x4x6". For 110-130 V, 60 Hz AC.
18 A 5171. Shpg. wt., 3 lbs..............................15.95

MALLORY "C" CELL/COMPACT LIGHT



Ultra-compact, lightweight flashlight provides more power than regular 2-cell flashlights. Powered by two MN-1400 "C" size Duracell alkaline batteries (included). Unbreakable plastic case, rust and corrosion proof. 6¼x2x1½", great for pocket or purse.
18 A 5172. Shpg. wt., 7 oz...................1.95

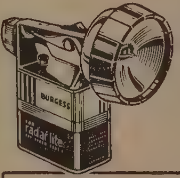
KEYSTONE BATTERY HOLDERS



For transistor assemblies, radios, meters, etc. Snap-clips, moistureproof fiber washers, mtg. holes and aluminum alloy, nickel-plated eyelets. *End to end. Wt., 3 oz.

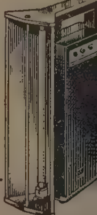
Stock No.	Mfr's Type	Holds	Burgess	Mallory	Eveready	PKG. OF 2
18 A 5900	104	1	....	RM4R	E4	.76
18 A 5901	139	1	CD6	RM12R,	E9, E-12,	.46
18 A 5902	140	2	9R,Z	TR133R,	E133,E502,	.76
18 A 5903	171	3	HG9,E133	RM502R,	915,1015E,	.98
18 A 5904	182	4	HG12R,333	ZM-9	505	1.28
18 A 5906	173	1	}1	TR233R	E233, 635	.60
18 A 5907	174	2				.76
18 A 5908	185	2	130*	....	935	.90
18 A 5909	137	1	}7		912	.46
18 A 5910	138	2		....		.76
18 A 5911	132	1	H-132R	TR132R, TR115R	E132	.60
18 A 5912	175	1	}2, Z4	RM42R	E42	.60
18 A 5913	176	2			N56	.76
18 A 5914	186	2	210*	....	D99	.92
18 A 5915	166	1	U10	....	411	.60
18 A 5271	203P	1	2U6	1604	216	.88

BURGESS



10.65 less battery

18.31 with batteries



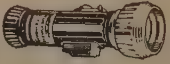
PANTHER-LITE

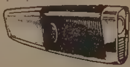
SAFARI-LITE

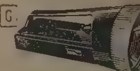
PANTHER-LITE SEALED BEAM LANTERN. 40,000 cp sealed beam, lig weight Cycolac® construction. Red alert flasher with switch handle. Contoured grip. Requires TW1 battery, order below.
18 A 5169. Shpg. wt., 2¼ lbs...............................10.
18 A 5170. TW1 Lantern Battery. (Use 1.) Shpg. wt., 3¼ lbs...2.

SAFARI-LITE FLUORESCENT PORTABLE LIGHT. Operates on batteries 117 VAC. With two Z46 batteries, extra batteries below.
18 A 5164. Shpg. wt., 11 lbs...............................18.
18 A 5143. Z46 Batteries. (Use 2.) Wt., 6¼ lbs....**Pkg. of 2 for 5.**

ASH-FLASH FLASHLIGHTS AND LANTERNS





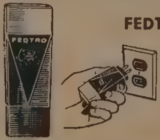


E HEAVY-DUTY MAGNET FLASHLIGHT. Celanese fortiflex: acid sistant, dent-proof, non-slip grip. Unbreakable lens, cushi lens guard. Black case, red end cap and magnet housing. Use 2 " batteries (order from page 295). 8x2½" dia. Japan.
18 A 5147. Shpg. wt., 8 oz.................................1

F RECHARGEABLE FLASHLIGHT. For pocket or purse. Two nick cadmium power cells. Plastic case, 5½x2⅝x1½".
18 A 5149 S. Japan. Shpg. wt., 8 oz.........................3.

G FLOATING HIGH-INTENSITY LANTERN. Has waterproof switch sealed-beam reflector, blinker. Unbreakable plastic case, circul lens guard. 10½x4¾x4¾". With 6 "D" batteries.
18 A 5146. Japan. Shpg. wt., 2¾ lbs.........................3.

FEDTRO RECHARGEABLE FLASHLIGHT



Lifetime rechargeable flashlight nev needs batteries, just snap off back a plug into 115 VAC outlet. Great for poc et or purse. Has high-impact plastic cas only 4½x1½x1½". Recharges overnig
18 A 5173 Wt., 5 oz...................3.

Power Supplies, Inverters, Chargers

EICO

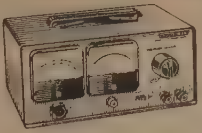
POWER SUPPLIES AND CHARGERS

MODEL 1020-W LOW-COST POWER SUPPLY

SOLID STATE

ile, completely transistorized port-
)C power and bias supply. Provides
uously variable output voltage
ored by a dual range voltmeter (0.6,
/DC). Output: 150 mA, 0-12 volts;
A, 12-24 volts; 330 mA, 24-30 volts.
ipple output, only 0.005% full load.
rises power transformer, full-wave
diode rectifier circuit, 2-transistor
led filter circuit. Size, 5x4x5½". For
25 V, 60 Hz AC.

4121. Shpg. wt., 4½ lbs. 34.95
4122. 1020-K Kit Form 25.95

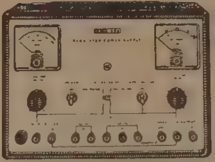


MODEL 1025-W TWO-METER POWER SUPPLY

SOLID STATE

Portable DC power and bias supply provides continuously variable output voltage monitored by a dual-range voltmeter (0-6, 0-30 VDC) and a 0-500 mA milliammeter. Output: 150 mA, 0-12 volts; 200 mA, 12-24 volts; 300 mA, 24-30 volts. Special filter circuit provide low ripple output of 0.005% at full rated load. Circuitry comprises power transformer, full-wave silicon rectifier circuit; 2-transistor cascaded filter circuit. Fused for added circuit protection. Overall size, 3¾x8x4¾". For 110-130 volts, 60 Hz AC.

21 A 4547. Shpg. wt., 5 lbs. 49.95
21 A 4548. 1025-K. Kit Form 34.95



1030-W TWO-OUTPUT SUPPLY

General-purpose supply offers two independent, continuously variable regulated DC outputs, plus two unregulated filament voltages. 0-150 VDC at 2 mA and 0-400 VDC at up to 150 mA. Regulated to ±0.3% or 0.3 V, whichever is higher, to 100 mA. Ripple, less than 3 mV rms. Filaments, 6.3 and 12.6 V at 3 A. Voltmeter, ammeter, standby switch. 13x8½x7". 110-120 V, 50-60 Hz AC.

21 A 4491 U. Wt., 21 lbs. 99.95
21 A 4492 U. 1030-K. Kit Form . 69.95

MODEL 1060-W BATTERY-CHARGER/ELIMINATOR

or 12-Volt Output
riable Transformer
tra-Low Ripple Output

Operates 6 or 12-volt equipment, including transistor types. Highly stable output. Voltages are adjusted by variable transformer. Has high-capacity electrolytic smoothing filter. Low range: 0.8 volts at 10 amps continuous. 20 amps intermittent: 1.5% ripple at 2 amps. 2% at 6 amps. High range: 0-16 volts at 6 amps continuous. 10 amps intermittent; 0.3% ripple at 2 amps. 1.5% at 10 amps. Steel case, 8¾x10½x7¾". 105-125 volts. 60 Hz AC. Shpg. wt., 19 lbs.

21 A 4125 X. 59.95
21 A 4126 X. 1060-K. Kit Form . 45.95

MODEL 1064-W BATTERY-CHARGER/ELIMINATOR

Low-Ripple Output

Low-ripple DC necessary to service transistorized equipment. Extra-heavy-duty selenium rectifiers. L-C filter circuit boasts iron-core choke and dual 5000 μF electrolytic capacitor. Provides two DC voltage ranges: 0-8 V at 10 amps cont., 20 amps intermit.; 0-16 V at 6 amps cont., 10 amps intermit. Ripple: 0-16 V, 1% at 6 amps; 0-8 V, 4-5% at 10 amps. Separate voltmeter and ammeter monitor voltage and current. Ammeter range automatically switches over to voltage range. 8½x5¾x7½". 105-125 V, 50-60 Hz AC. 15 lbs.

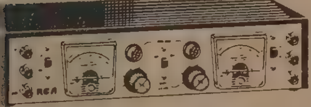
21 A 4119 X. 69.95

MODEL 1064-K. As above, but in kit form.
21 A 4120 X. 49.95

RCA

CONSTANT-VOLTAGE DC POWER SUPPLIES

WP-703A



WP-702A

Model WP-703A. For circuit design, servicing, industrial and educational applications. Output is continuously adjustable 0-20 V at up to 500 mA. Front panel meter for voltage and current levels. Automatic current limiting, overload indicator. Five-way output terminals, +DC, —DC and GND. Three-wire AC line cord. Overall size, 5¼x8¼x3¼". 115 VAC.

21 A 4562. Wt., 3 lbs. 58.00

21 A 4563. **Model WP-704A.** Above, 0-40 V at 0-250 mA. Wt., 3 lbs. ... 58.00

Model WP-702A. Dual unit power supply delivers continuously adjustable output of 0-20 volts at 0-200 mA from each section. Features line and load regulation; front panel voltage and current meter for each section. Overload indicator lamp, short-circuit protection. Five-way terminals for +DC, —DC and GND. Overall size, 6x12x3". 115 V, 50-60 Hz AC.

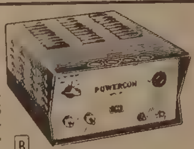
21 A 4561. Wt., 4 lbs. 87.00

21 A 4560. **Model WP-700A.** As above, single unit. 4x6½x3". 3 lbs. 48.00

DE

A

VIBRATOR-TYPE DC-TO-AC POWER INVERTERS



B

A DC-TO-AC INVERTERS WITH SQUARE WAVE OUTPUT

Vibrator-type inverters start instantly. Output is 115 volts, 60 Hz with excellent stability even under varying loads. High capabilities for intermittent overloads; wattage figures for intermittent use are rated for power factors from 70 to 100%. Superior filtering for excellent performance with TV, shortwave, FM receivers. Conservatively rated. Fig. A except *without finger holes.

Stock No.	Mfr's Type	Typical Applications	Input VDC	Watts Cont.	Watts Int.	Size	Wt., Lbs.	EACH
21 A 4493	12SP2A	Shaver only, intermittent duty	12	—	20	3⅞x2⅞x2¾"	2	14.46
21 A 4413	12A4*	Test gear, dictaphones, phonos, shavers	12	40	50	6¼x4⅛x3⅜"	6	25.48
21 A 4415 X	12B8	Small recorders & TV sets, stereo amplifiers	12	80	100	8¾x7⅝x3⅞"	12	39.84
21 A 4416 X	12B10	Office machines, calculators, typewriters	12	100	125	8¼x7⅝x3⅞"	14	41.95
21 A 4417 X	12TV12	Small-screen TV, radios, phonos, appliances	12	120	140	8¾x7⅝x3⅞"	16	42.95
21 A 4418 X	12D15	Small induction soldering guns, office machines	12	150	175	10⅜x9⅞x5½"	26	73.00
21 A 4419 X	12D22	Multi use: camp trailer, small tools, CB, TV	12	220	250	10⅜x9⅞x5½"	31	90.50
21 A 4420 X	28D15	Aircraft, marine, others using 28 VDC	28	150	175	10⅜x9⅞x5½"	26	87.50

21 A 4431. **RK-112 Remote Control.** For all of above except 12SP2A, 12A4. Wt., 1 lb. 10.81

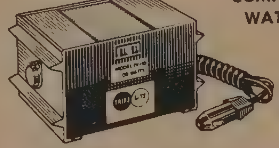
B DC-TO-AC INVERTERS WITH REGULATED SINE-WAVE OUTPUT

Similar to above, but have added reactor and capacitors to form true sine-wave output indistinguishable from commercial power. May be used portable or permanently mounted. Automatic load regulation; extremely low hum.

Stock No.	Mfr's Type	Typical Applications	Input VDC	Watts Cont.	Watts Int.	Size	Wt., Lbs.	EACH
21 A 4421 U	12DSW10	Like utility power; any PF load above 25%	12	100	125	10x9⅞x5½"	22	88.06
21 A 4422 U	12ESW25	SSB, large PA systems, 100-watt amplifiers	12	250	300	12x9⅞x5½"	31	117.51

DC-to-AC Power Inverters for All Applications

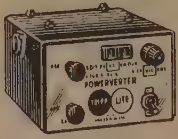
TRIPP LITE INVERTERS PROVIDE REGULAR AC HOUSE CURRENT FROM 12-VOLT BATTER



COMPACT 100-WATT POWER INVERTER

SOLID STATE

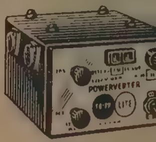
MODEL PV-100. Solid-state inverter plugs into 12-volt DC car cigarette lighter, delivers instant AC house current at 100 watts continuous. Specially designed to power personal-size TV sets in the car. Also ideal for operating portable tape recorders, small tools, etc. in car, trailer, boat or plane. Lightweight, compact design (only 4¾x4¾x3″) with two power-switching transistors for reliable performance. Delivers 115 watts intermittent output (5 minutes); instantaneous surges up to 130 watts. With cord and cigarette lighter plug.
21 A 4577. Shpg. wt., 5 lbs. **29.95**



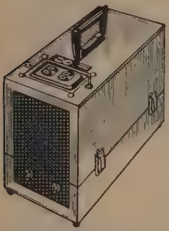
SOLID STATE

INVERTER AND INVERTER/CHARGER

MODEL PV-150. Quality constructed 150-watt, 2-transistor, low-cost inverter brings regular AC house current to cars and boats. Converts 12 volts DC to 117 volts, 60 Hz AC. Delivers 150 watts continuously, 195 watts instantaneous. Easily connected to any 12-VDC system. Includes on-off switch, replaceable fuse. Ruggedly constructed for shock resistance. Anodized heat sink. All metal parts treated for resistance to weather and corrosion. 3½x5x5″. With mounting studs.
21 A 4432. Wt., 5½ lbs. **39.95**



MODEL PV-200B. Dependable 2
watt DC-to-AC inverter with bu
in 6-amp battery charger. H
same features as Model PV-150
left, but continuously delivers 2
watts; 250 watts instantaneous.
addition, has 4 power transist
and exclusive "power boost" circ
that permit bursts of power
heavy, short duration jobs such
starting motor-type applianc
Mounts under or on top of da
board, or anywhere inside vehi
Overall size, 3½x5x5″. With fu
mounting studs.
21 A 4433. Wt., 6 lbs. **49**

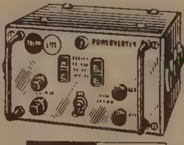


SOLID STATE

800-WATT POWER INVERTER

MODEL PV-800-FC. Highly stable inverter converts 12 VDC to 117 V, 60 Hz AC with frequency accuracy of 1 Hz. Particularly suited for true reproduction of hi-fi sound. Solid-state design eliminates chattering reeds—no moving parts to wear out. Ideal for "on the spot" power for outside servicemen. Delivers 800 watts continuously, 900 watts intermittently, 1000 watt surge. 24 transistors, zener diode. Overload/low-battery light. Polarity protection. Silver-color corrosion-resistant case, 10x7x14″. Carrying handle. Note: Not intended for use with capacitor motors, heaters, refrigerators.
21 A 4360 U. Shpg. wt., 38 lbs. . . **290.00**

HEAVY-DUTY 450-WATT DC-TO-AC INVERTER/CHARGE



SOLID STATE

- 450-Watt Continuous
- 550-Watt Power Surge
- Battery Charge and Drain Indicator

MODEL PV-450B. Dependable so
state static design with 10 pow
switching transistors; meets exact
heavy-duty requirements. Ideal for
stant AC where fast emergency po
is needed. 450-watt continuous o
put, 500-watt intermittent (5 m
utes). Hash-free TV and AM-FM
ception without interference. Buil
rack handles. With fuses. 4x7x6″.
21 A 4355 U. Wt., 13 lbs. **99**

MODEL PV-450FC. Above, but with
quency control for constant 60 Hz A
for recorders, phonos, etc.
21 A 4354 U. Wt., 15¼ lbs. . . **149**

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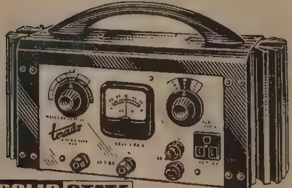
terado POWER INVERTERS AND BATTERY CHARGERS



SOLID STATE

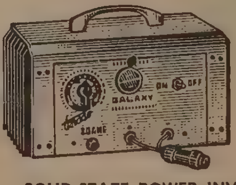
MARK I INVERTER/CHARGER

- Delivers 450-500 Watts of AC Power
- Charges Batteries at Up to 20 Amps
- Efficient Solid-State Circuit

MODEL 50-131. Now you can enjoy the luxury and convenience of using your electrical appliances anywhere. Provides full 450 to 500 watts of 117 volt AC power from any 12-volt storage battery. Lets you operate a wide variety of appliances—radios, TV, tools, shavers, lights, hi-fi sets—in car, trailer or boat.

The Mark I also charges 12-volt batteries from 117-volt AC source. Charges at 20 amp or 10-amp rate, or at a low trickle charge. Meter indicates charging rate. Rugged solid-state circuit provides 450 watts continuously, or 500 watts intermittently. AC output receptacle on front panel. Fuse protected. Carrying handle for easy portable use. Compact, sturdy metal case, 6x12½x6″. Shpg. wt., 21 lbs.
21 A 4265 U **104.50**

MODEL 50-132 MARK II. Same as above but rated 275 watts continuous, 300 watts intermittent. Shpg. wt., 21 lbs.
21 A 4266 U **89.50**



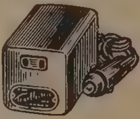
SOLID STATE

12 VDC to 117 VAC

SOLID-STATE POWER INVERTERS

Convert 12 volts DC to 117 volts, 60 Hz AC. *Automatic frequency control maintains output within ½ cycle of 60 Hz for operating tape recorders, phonos. A—10¾x6x6″; B—12½x6x6″; C—10¾x13x7¼″.

Stock No.	Mfr's Type	Capacity Cont.	Capacity Intr.	Size	Wt. Lbs.	EACH
21 A 4499	50-205	140	175	A	10½	46.94
21 A 4500	50-170	125	150	A	10½	39.87
21 A 4501 U	50-129	275	300	B	20	78.15
21 A 4487 U	50-175	*150	175	A	21	76.67
21 A 4502 U	50-128	450	500	B	20	97.17
21 A 4383 U	50-201	*150	175	A	20	100.51
21 A 4384 U	50-200	*175	200	A	21	114.53
21 A 4382 U	50-191	*275	300	A	30	158.40
21 A 4381 Z	50-202	*550	600	C	60	327.74

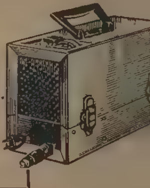


MODEL 50-116 "SENIOR" INVERTER

- For 12-V Batteries
- 40 Watts Constant
- 50 Watts Intermittent

Plugs into 12-volt cigarette lighter on dash. Aluminum case with coppertone baked enamel. AC plug-in receptacle on front. 2¼x2½x4½″. Shpg. wt., 3 lbs.
21 A 4484 . . . . **18.47**

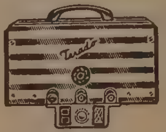
"TRAV-ELECTRIC" WITH BATTERY AND CHARGER



SELF CONTAINED
60-Hz AC
POWER SOURCE

MODEL 50-160. A truly portable source
electricity, ready to go where and when
choose with built-in battery and char
Inverter delivers 125 watts of AC for p
able TV, hi-fi, lights, appliances. Batt
can be recharged from any AC outlet,
from auto cigarette lighter while enro
One charge runs portable TV 3 to 4 ho

"Trav-Electric" comes complete with s
age battery, inverter, charger, easy-to-r
battery condition meter and heavy cop
clad steel carrying case. Size, 12x5½
Supplies 125 watts continuously, 175 w
intermittent. Shpg. wt., 30 lbs.
21 A 4503 U **74**



"SUPREME" DC-AC INVERT

- Remote Control
- Variable Outpu
- Signal Light
- Frequency Filte

MODEL 50-153. For 12-volt DC only.
watts constant, 200 watts intermitt
Copper-clad ventilated steel case. With b
tery cables. Filtered for tape record
10¾x6x6″. Shpg. wt., 25 lbs.
21 A 4488 U **84**

—Allied's Semiconductor and Integrated Circuit Directory

EY TO NAMES OF MANUFACTURERS

. No.	Mfr.	Name
A 1	RCA	Radio Corp. of America
A 12	SYL	Sylvania
A 24	IR	International Rectifier
A 26	MOT	Motorola
A 30	SPR	Sprague
A 31	ST	Sarkes Tarzian
A 32	TI	Texas Instruments

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- You Get Lowest Prices in Effect at Time of Your Order
- New Types Are Added As They Are Announced

iconductors listed on these pages are the most popular types stocked by Allied—for a complete ng of all units stocked by Allied, ask for Directory No. 23 A 7901. It will be sent at no charge.

HOW TO ORDER SEMICONDUCTORS

ordering, specify Department Number, followed anufacturer's Type Number and Name.

For example: 49 A 12 1N21B-SYL
designates Sylvania Type 1N21B

HOW TO ORDER INTEGRATED CIRCUITS

When ordering, specify Department Number, followed by Manufacturer's Type Number and Name.

For example: 50 A 1 CA3000-RCA
designates Radio Corp. of America Type CA3000

	Mfr.	EACH
	SYL	.81
	SYL	.84
	SYL	2.10
	SYL	3.16
	SYL	6.30
E	SYL	3.16
	SYL	.81
	SYL	.84
	SYL	2.10
	SYL	3.16
	SYL	7.15
E	SYL	3.16
	SYL	3.53
	SYL	6.50
	RCA	.30
	SYL	1.58
	SYL	.49
	SYL	.49
	SYL	.30
	SYL	.42
	SYL	.40
	SYL	.55
	RCA	.30
	SYL	.36
	SYL	.30
	SYL	.48
	SYL	.28
	SYL	.28
	SYL	.30
	SYL	4.50
	SYL	.48
G	SYL	.91
	SYL	.20
	SYL	.33
	SYL	.31
	SYL	.50
	SYL	.32
	SYL	.49
A	SYL	.23
	SYL	.30
	SYL	.32
	SYL	.35
	SYL	.34
	SYL	.35
B	SYL	1.03
B	MOT	1.50
B	MOT	1.65
C	MOT	1.95
B	MOT	2.40
C	MOT	2.70
	SYL	.65
	SYL	.65
	TI	2.16
	RCA	.48
	SYL	.31
	SYL	.34
	SYL	.29
	SYL	.31
	SYL	.51
	SYL	.34
	RCA	.55
	MOT	5.45
B	RCA	.53
B	RCA	.60
B	RCA	.66
B	RCA	.98
B	RCA	.92
B	RCA	1.12
	SYL	.42
	SYL	.45
	SYL	.48
	SYL	.51
	SYL	.42
	SYL	.44

Type	Mfr.	EACH
1N463	SYL	.54
1N464	SYL	.53
1N482	SYL	.66
1N483	SYL	.70
1N484	SYL	.70
1N484A	SYL	.70
1N485	SYL	.90
1N486A	SYL	.90
1N487A	SYL	1.41
1N488	SYL	1.17
1N497	SYL	.39
1N498	SYL	.44
1N500	SYL	.53
1N536	RCA	.36
1N537	RCA	.40
1N538	RCA	.45
1N539	RCA	.50
1N540	RCA	.56
1N547	RCA	.79
1N625	SYL	.43
1N626	SYL	.45
1N627	SYL	.60
1N628	SYL	.72
1N629	SYL	.81
1N634	SYL	.52
1N643A	SYL	1.50
1N645	TI	1.40
1N645A	TI	1.65
1N646	TI	1.60
1N647	SYL	1.70
1N648	TI	1.80
1N649	SYL	2.50
1N658	TI	1.48
1N659	SYL	.58
1N660	TI	.65
1N661	TI	.98
1N662	SYL	.92
1N663	SYL	1.20
1N695	SYL	.30
1N702	IR	1.00
1N703	IR	1.00
1N704	IR	1.00
1N705	IR	1.00
1N706	IR	1.00
1N707	IR	1.00
1N708	IR	1.00
1N709	IR	1.00
1N710	IR	1.00
1N711	IR	1.00
1N712	IR	1.00
1N713	IR	1.00
1N714	IR	1.00
1N715	IR	1.00
1N718	IR	1.00
1N721	IR	1.00
1N722	IR	1.00
1N723	IR	1.00
1N746	IR	1.00
1N747	IR	1.00
1N748	IR	1.00
1N749	IR	1.00
1N750	IR	1.00
1N751	IR	1.00
1N752	IR	1.00
1N753	IR	1.00
1N754	IR	1.00
1N755	IR	1.00
1N756	IR	1.00
1N757	IR	1.00
1N758	IR	1.00
1N759	IR	1.00
1N763	IR	1.00
1N764	MOT	2.15
1N765	TI	1.05

Type	Mfr.	EACH
1N766	TI	1.05
1N770	SYL	.48
1N816	SYL	.52
1N821	MOT	2.75
1N823	MOT	3.60
1N825	MOT	5.80
1N825A	MOT	6.50
1N827	IR	8.75
1N830A	SYL	3.85
1N831	SYL	6.85
1N905A	SYL	1.55
1N914	SYL	.45
1N914A	SYL	.50
1N916	SYL	.75
1N916A	SYL	.75
1N935	MOT	2.30
1N935A	MOT	2.60
1N936	MOT	2.75
1N936A	MOT	3.55
1N937	MOT	5.35
1N937A	MOT	6.15
1N938	MOT	6.95
1N938A	MOT	7.55
1N941	MOT	3.20
1N941A	MOT	3.40
1N942	MOT	3.50
1N942A	MOT	4.35
1N943	MOT	6.90
1N943A	MOT	6.95
1N957	MOT	2.15
1N957A	IR	1.00
1N958B	MOT	2.95
1N959A	IR	1.00
1N960	MOT	2.15
1N960A	IR	1.00
1N961	MOT	2.15
1N961A	IR	1.00
1N962	MOT	2.15
1N962A	MOT	1.50
1N963	MOT	2.15
1N963A	IR	1.00
1N964	MOT	2.15
1N964A	IR	1.00
1N965	MOT	2.15
1N965A	IR	1.00
1N966	MOT	2.15
1N966A	IR	1.00
1N967	MOT	2.15
1N967A	IR	1.00
1N968	MOT	2.15
1N968A	IR	1.00
1N969	MOT	2.15
1N969A	IR	1.00
1N970	MOT	2.15
1N970A	IR	1.00
1N971	MOT	2.15
1N971A	IR	1.00
1N972A	IR	1.00
1N973B	TI	2.95
1N974B	MOT	2.95
1N975	MOT	2.15
1N975B	MOT	2.95
1N976	MOT	2.15
1N976B	MOT	2.95
1N977	MOT	2.15
1N977A	MOT	2.35
1N977B	MOT	2.95
1N978	MOT	2.15
1N978A	MOT	2.35
1N978B	MOT	2.95
1N979	MOT	2.15
1N979A	MOT	2.35
1N979B	MOT	2.95
1N980	MOT	2.15

Type	Mfr.	EACH
1N980A	MOT	2.35
1N980B	MOT	2.95
1N981	MOT	2.15
1N981B	MOT	2.95
1N982	MOT	2.15
1N982A	MOT	2.35
1N984A	MOT	2.35
1N985	MOT	9.50
1N985A	MOT	3.00
1N985B	MOT	3.65
1N987	MOT	2.60
1N987A	MOT	3.00
1N988	MOT	2.60
1N988A	MOT	3.00
1N989A	MOT	3.00
1N989B	MOT	3.65
1N990	MOT	2.60
1N990A	MOT	3.00
1N992	MOT	2.60
1N992A	MOT	3.00
1N992B	MOT	3.65
1N995	SYL	.30
1N1081	ST	.60
1N1082	ST	.65
1N1083	ST	.70
1N1084	ST	.75
1N1085A	ST	3.34
1N1086A	ST	4.00
1N1088A	ST	5.35
1N1095	RCA	.77
1N1096	TI	.97
1N1108	ST	3.15
1N1109	ST	4.00
1N1110	ST	4.75
1N1111	ST	5.65
1N1113	ST	7.35
1N1124A	TI	1.86
1N1125	TI	2.25
1N1125A	TI	2.25
1N1126A	TI	3.05
1N1183	MOT	1.80
1N1183A	RCA	2.15
1N1183RA	RCA	2.15
1N1184	MOT	2.10
1N1184A	RCA	2.48
1N1184RA	RCA	2.48
1N1185	MOT	2.60
1N1186	MOT	3.15
1N1186A	RCA	3.55
1N1186RA	RCA	3.55
1N1187	MOT	4.65
1N1187A	RCA	4.95
1N1188	MOT	5.25
1N1188A	RCA	6.19
1N1188RA	RCA	6.19
1N1189	MOT	6.00
1N1189A	MOT	7.05
1N1190	MOT	6.75
1N1191	MOT	1.35
1N1192	MOT	1.50
1N1193	MOT	1.80
1N1194	MOT	2.60
1N1195	MOT	3.80
1N1195A	RCA	3.88
1N1196	MOT	4.35
1N1196A	RCA	4.95
1N1197A	RCA	5.94
1N1198	MOT	6.75
1N1198A	MOT	7.05
1N1199A	RCA	1.24
1N1199RA	RCA	1.24
1N1200A	RCA	1.41
1N1200RA	RCA	1.41
1N1201	IR	1.75

Type	Mfr.	EACH
1N1202	ST	1.25
1N1202A	RCA	2.48
1N1203	IR	3.45
1N1203A	RCA	3.47
1N1203RA	RCA	3.47
1N1204	IR	4.40
1N1204A	RCA	4.46
1N1204RA	RCA	4.46
1N1205	IR	5.25
1N1205A	RCA	5.36
1N1206	IR	6.10
1N1206A	RCA	6.19
1N1206RA	RCA	6.19
1N1313	MOT	3.10
1N1314	MOT	3.10
1N1315	MOT	3.10
1N1316	MOT	3.10
1N1317	MOT	3.10
1N1320	MOT	3.10
1N1321	MOT	3.10
1N1323	MOT	3.10
1N1324	MOT	3.10
1N1326	MOT	3.10
1N1341	IR	.95
1N1341B	RCA	1.16
1N1342	IR	1.20
1N1342B	RCA	1.32
1N1343	ST	1.20
1N1344	IR	2.05
1N1344B	RCA	2.15
1N1345	IR	2.85
1N1345B	RCA	3.05
1N1346	ST	1.50
1N1346B	RCA	3.96
1N1347	IR	4.60
1N1347B	RCA	4.75
1N1348B	IR	5.75
1N1348B	RCA	5.78
1N1507	IR	2.75
1N1508	IR	2.75
1N1509	IR	2.75
1N1510	IR	2.75
1N1511	IR	2.75
1N1512	IR	2.75
1N1513	IR	2.75
1N1513A	IR	3.45
1N1514	IR	2.75
1N1515	IR	2.75
1N1516	IR	2.75
1N1517	IR	2.75
1N1518	IR	2.70
1N1519	IR	2.70
1N1519A	IR	3.50
1N1520	IR	2.70
1N1521	IR	2.70
1N1522	IR	2.70
1N1523	IR	2.70
1N1524	IR	2.70
1N1525	IR	2.70
1N1526	IR	2.70
1N1527	IR	2.70
1N1528	IR	2.70
1N1581	TI	1.05
1N1588	IR	3.80
1N1589	IR	3.80
1N1590A	IR	4.55
1N1591	IR	3.80
1N1591A	IR	4.55
1N1592	IR	3.80
1N1593A	IR	4.55
1N1594	IR	3.80

Type	Mfr.	EACH
1N1594A	IR	4.55
1N1595	IR	3.80
1N1595A	IR	4.55
1N1596	IR	3.80
1N1597	IR	3.80
1N1598	IR	3.80
1N1599	IR	5.95
1N1600	IR	5.95
1N1600A	IR	8.00
1N1601	IR	5.95
1N1601A	IR	8.00
1N1602	IR	5.95
1N1602A	IR	8.00
1N1604	IR	5.95
1N1604A	IR	8.00
1N1605	IR	5.95
1N1605A	IR	8.00
1N1606	IR	5.95
1N1606A	IR	8.00
1N1608	IR	5.95
1N1608A	IR	8.00
1N1609	IR	5.95
1N1612R	RCA	1.08
1N1613	RCA	1.24
1N1613R	RCA	1.24
1N1614	RCA	1.90
1N1614R	RCA	1.90
1N1615	RCA	3.71
1N1615R	RCA	3.71
1N1616	RCA	5.36
1N1621	ST	2.24
1N1622	ST	2.80
1N1624	ST	4.24
1N1731	MOT	6.00
1N1732	MOT	6.75
1N1733	MOT	7.80
1N1735	MOT	5.40
1N1736	IR	6.52
1N1763A	RCA	.42
1N1764A	RCA	.52
1N1826	TI	5.10
1N1832	TI	5.10
1N1833	TI	5.10
1N1835	TI	5.10
1N2069	SYL	.45
1N2069A	SYL	.50
1N2070	SYL	.57
1N2070A	SYL	.67
1N2071	SYL	.72
1N2071A	SYL	.75
1N2175	TI	6.40
1N2326	RCA	.55
1N2389	ST	6.10
1N2482	ST	.33
1N2483	ST	.35
1N2484	ST	.37
1N2490	ST	7.07
1N2610	ST	.35
1N2611	ST	.37
1N2613	ST	.43
1N2615	ST	.47
1N2620	MOT	4.10
1N2620A	MOT	4.35
1N2620B	MOT	4.90
1N2621	MOT	4.60
1N2621A	MOT	5.55
1N2622	MOT	7.60
1N2622A	MOT	8.15
1N2622B	MOT	9.35
1N2623	MOT	8.80
1N2630	IR	6.25
1N2631	IR	5.50
1N2633	IR	5.50
1N2637	IR	9.65
1N2804	MOT	5.65
1N2804A	MOT	7.65
1N2805	MOT	5.65
1N2805A	MOT	7.65
1N2806	MOT	5.65
1N2806A	MOT	7.65
1N2807	MOT	5.65
1N2807A	MOT	7.65
1N2808	MOT	5.65
1N2808A	MOT	7.65
1N2809	MOT	5.65
1N2809A	MOT	7.65
1N2810	MOT	5.65
1N2810A	MOT	7.65
1N2811	MOT	5.65
1N2811A	MOT	7.65
1N2812	MOT	5.65
1N2812A	MOT	7.65
1N2813	MOT	5.65
1N2813A	MOT	7.65
1N2816	MOT	5.65
1N2816A	MOT	7.65
1N2817	MOT	5.65
1N2817A	MOT	7.65
1N2818	MOT	5.65
1N2818A	MOT	7.65
1N2819	MOT	5.65
1N2819A	MOT	7.65
1N2820	MOT	5.65

Type	Mfr.	EACH
1N2820A	MOT	7.65
1N2821	MOT	5.65
1N2821A	MOT	7.65
1N2822	MOT	5.65
1N2822A	MOT	7.65
1N2824	MOT	5.65
1N2824A	MOT	7.65
1N2825	MOT	5.65
1N2825A	MOT	7.65
1N2826	MOT	5.65
1N2826A	MOT	7.65
1N2828	MOT	5.65
1N2828A	MOT	7.65
1N2829	MOT	5.65
1N2829A	MOT	7.65
1N2830	MOT	5.65
1N2830A	MOT	7.65
1N2831	MOT	5.65
1N2831A	MOT	7.65
1N2833	MOT	5.65
1N2833A	MOT	7.65
1N2834	MOT	5.65
1N2834A	MOT	7.65
1N2835	MOT	5.65
1N2835A	MOT	7.65
1N2838	MOT	5.65
1N2838A	MOT	7.65
1N2839	MOT	6.80
1N2839A	MOT	11.30
1N2840	MOT	6.80
1N2840A	MOT	11.30
1N2841	MOT	6.80
1N2841A	MOT	11.30
1N2842	MOT	6.80
1N2842A	MOT	11.30
1N2843	MOT	6.80
1N2846	MOT	6.80
1N2858A	RCA	.33
1N2859A	RCA	.37
1N2860A	RCA	.40
1N2861A	RCA	.42
1N2862A	RCA	.48
1N2863A	RCA	.58
1N2864A	RCA	.70
1N2970	MOT	5.45
1N2971	MOT	5.45
1N2972	MOT	5.45
1N2973	MOT	5.45
1N2974	MOT	5.45
1N2975	MOT	5.45
1N2976	MOT	5.45
1N2977	MOT	5.45
1N2978	MOT	5.45
1N2979	MOT	5.45
1N2979A	MOT	5.85
1N2980	MOT	5.45
1N2980A	MOT	5.85
1N2982	MOT	5.45
1N2984	MOT	5.45
1N2985	MOT	5.45
1N2986	MOT	5.45
1N2987	MOT	5.45
1N2987A	MOT	5.85
1N2988	MOT	5.45
1N2988B	MOT	7.30
1N2989	MOT	5.45
1N2990	MOT	5.45
1N2991	MOT	5.45
1N2992	MOT	5.45
1N2993	MOT	5.45
1N2994	MOT	5.45
1N2995	MOT	5.45
1N2996	MOT	5.45
1N2996A	MOT	5.85
1N2997	MOT	5.45
1N2998	MOT	5.45
1N2999	MOT	5.45
1N2999A	MOT	5.85
1N3002	MOT	5.45
1N3002A	MOT	5.85
1N3003	MOT	5.45
1N3003A	MOT	5.85
1N3004	MOT	5.45
1N3004A	MOT	5.85
1N3005	MOT	5.45
1N3005A	MOT	5.85
1N3006	MOT	5.45
1N3006A	MOT	5.85
1N3007	MOT	5.45
1N3007A	MOT	5.85
1N3008	MOT	5.45
1N3008A	MOT	5.85
1N3009	MOT	5.45
1N3009A	MOT	5.85
1N3011	MOT	5.45
1N3011A	MOT	5.85
1N3013	MOT	6.00
1N3014	MOT	6.00
1N3015	MOT	6.00
1N3016	MOT	2.85
1N3016A	MOT	3.20
1N3017	MOT	2.85
1N3017A	MOT	3.20
1N3018	MOT	2.85
1N3018A	MOT	3.20

Type	Mfr.	EACH
1N3019	MOT	2.85
1N3019A	MOT	3.20
1N3020	MOT	2.85
1N3020A	MOT	3.20
1N3021	MOT	2.85
1N3021A	MOT	3.20
1N3022	MOT	2.85
1N3022A	MOT	3.20
1N3023	MOT	2.85
1N3023A	MOT	3.20
1N3024	MOT	2.85
1N3024A	MOT	3.20
1N3025	MOT	2.85
1N3025A	MOT	3.20
1N3026	MOT	2.85
1N3026A	MOT	3.20
1N3027	MOT	2.85
1N3027A	MOT	3.20
1N3028	MOT	2.85
1N3028A	MOT	3.20
1N3029	MOT	2.85
1N3029A	MOT	3.20
1N3030	MOT	2.85
1N3030A	MOT	3.20
1N3031	MOT	2.85
1N3031A	MOT	3.20
1N3032	MOT	2.85
1N3032A	MOT	3.20
1N3033	MOT	2.85
1N3033A	MOT	3.20
1N3034	MOT	2.85
1N3034A	MOT	3.20
1N3035	MOT	2.85
1N3035A	MOT	3.20
1N3036	MOT	2.85
1N3036A	MOT	3.20
1N3037	MOT	2.85
1N3037A	MOT	3.20
1N3038	MOT	2.85
1N3038A	MOT	3.20
1N3039	MOT	2.85
1N3039A	MOT	3.20
1N3040	MOT	2.85
1N3040A	MOT	3.20
1N3041	MOT	2.85
1N3041A	MOT	3.20
1N3042	MOT	2.85
1N3042A	MOT	3.20
1N3043	MOT	2.85
1N3043A	MOT	3.20
1N3044	MOT	2.85
1N3044A	MOT	3.20
1N3045	MOT	2.95
1N3045A	MOT	3.25
1N3046	MOT	2.95
1N3046A	MOT	3.25
1N3047	MOT	2.95
1N3047A	MOT	3.25
1N3048	MOT	2.95
1N3048A	MOT	3.25
1N3049	MOT	2.95
1N3050	MOT	2.95
1N3050A	MOT	3.25
1N3051	MOT	2.95
1N3051A	MOT	3.25
1N3085	IR	8.00
1N3111	IR	7.00
1N3154	MOT	2.60
1N3154A	MOT	3.60
1N3155	MOT	3.55
1N3156	MOT	6.15
1N3157	MOT	7.60
1N3193	RCA	.35
1N3194	RCA	.38
1N3195	RCA	.53
1N3196	RCA	.74
1N3208	MOT	1.10
1N3209	MOT	1.25
1N3210	MOT	1.70
1N3211	MOT	2.30
1N3212	MOT	2.55
1N3213	MOT	3.45
1N3214	MOT	3.90
1N3253	RCA	.38
1N3254	RCA	.42
1N3255	RCA	.56
1N3256	RCA	.78
1N3282	MOT	2.45
1N3283	MOT	3.05
1N3284	MOT	7.95
1N3285	MOT	10.05
1N3305	MOT	5.65
1N3305A	MOT	7.65
1N3306	MOT	5.65
1N3306A	MOT	7.65
1N3307	MOT	5.65
1N3308	MOT	5.65
1N3309	IR	5.65
1N3309A	MOT	7.65
1N3310	MOT	5.65
1N3310A	MOT	5.65
1N3311	IR	5.50
1N3311A	MOT	7.65
1N3312	MOT	5.65
1N3312A	MOT	7.65

Type	Mfr.	EACH
1N3313	IR	5.50
1N3313A	MOT	7.65
1N3314	IR	5.50
1N3314A	MOT	7.65
1N3315	MOT	5.65
1N3315A	MOT	7.65
1N3316	MOT	5.65
1N3316A	MOT	7.65
1N3317	MOT	5.65
1N3317A	MOT	7.65
1N3318	MOT	5.65
1N3318A	MOT	7.65
1N3319	MOT	5.65
1N3319A	MOT	7.65
1N3320	MOT	5.65
1N3320A	MOT	7.65
1N3321	IR	5.50
1N3321A	MOT	7.65
1N3322	MOT	5.65
1N3322A	MOT	7.65
1N3323	IR	5.50
1N3323A	MOT	7.65
1N3324	IR	5.50
1N3324A	MOT	7.65
1N3325	MOT	5.65
1N3325A	MOT	7.65
1N3326	MOT	5.65
1N3326A	MOT	7.65
1N3327	MOT	5.65
1N3327A	MOT	7.65
1N3328	MOT	5.65
1N3328A	MOT	7.65
1N3329	MOT	5.65
1N3329A	MOT	7.65
1N3330	MOT	5.65
1N3330A	MOT	7.65
1N3331	MOT	5.65
1N3331A	MOT	7.65
1N3333A	MOT	7.65
1N3334	MOT	5.65
1N3334A	MOT	7.65
1N3335	MOT	5.65
1N3335A	MOT	7.65
1N3338	MOT	5.65
1N3338A	MOT	7.65
1N3339	MOT	5.65
1N3339A	MOT	7.65
1N3340	IR	5.50
1N3340A	MOT	7.65
1N3341	MOT	6.80
1N3342	MOT	6.80
1N3343	MOT	6.80
1N3344	MOT	6.80
1N3345	MOT	6.80
1N3346	MOT	6.80
1N3347	MOT	6.80
1N3348	MOT	6.80
1N3350	MOT	6.80
1N3491	MOT	.67
1N3492	MOT	.76
1N3493	MOT	1.11
1N3494	MOT	1.27
1N3495	MOT	1.48
1N3563	RCA	.94
1N3580A	MOT	5.20
1N3581	MOT	5.55
1N3605	SYL	.72
1N3639	IR	.55
1N3641	IR	1.00
1N3659	MOT	.90
1N3660	MOT	.99
1N3661	MOT	1.33
1N3662	MOT	1.48
1N3663	MOT	1.70
1N3670	IR	7.80
1N3671	IR	8.70
1N3680	MOT	3.45
1N3680B	MOT	4.90
1N3683A	MOT	4.10
1N3683B	MOT	4.90
1N3684	MOT	3.45
1N3685	MOT	3.45
1N3686B	MOT	4.90
1N3689	MOT	3.45
1N3689B	MOT	4.90
1N3696	MOT	3.45
1N3731	SYL	.85
1N3754	RCA	.32
1N3755	RCA	.33
1N3756	RCA	.35
1N3785	MOT	3.75
1N3785A	MOT	5.30
1N3786	MOT	3.75
1N3787	MOT	3.75
1N3787A	MOT	5.30
1N3788	MOT	3.75
1N3788A	MOT	5.30
1N3789	MOT	3.75
1N3789A	MOT	5.30
1N3790	MOT	3.75
1N3791	MOT	3.75
1N3791A	MOT	5.30
1N3792	MOT	3.75
1N3792A	MOT	5.30
1N3792B	MOT	6.95

Type	Mfr.
1N3793	MOT
1N3793A	MOT
1N3794	MOT
1N3794A	MOT
1N3795	MOT
1N3795A	MOT
1N3796	MOT
1N3796A	MOT
1N3797	MOT
1N3797A	MOT
1N3798	MOT
1N3798A	MOT
1N3799	MOT
1N3799A	MOT
1N3800	MOT
1N3800A	MOT
1N3801	MOT
1N3801A	MOT
1N3802	MOT
1N3802A	MOT
1N3803	MOT
1N3803A	MOT
1N3804	MOT
1N3804A	MOT
1N3805	MOT
1N3805A	MOT
1N3806	MOT
1N3806A	MOT
1N3807	MOT
1N3807A	MOT
1N3808	MOT
1N3808A	MOT
1N3809	MOT
1N3809A	MOT
1N3810	MOT
1N3810A	MOT
1N3811	MOT
1N3811A	MOT
1N3812	MOT
1N3812A	MOT
1N3813	MOT
1N3813A	MOT
1N3815	MOT
1N3815A	MOT
1N3817	MOT
1N3817A	MOT
1N3818	MOT
1N3818A	MOT
1N3820	MOT
1N3820A	MOT
1N3821	IR
1N3821A	MOT
1N3822	IR
1N3822A	MOT
1N3823	IR
1N3823A	MOT
1N3824	IR
1N3824A	MOT
1N3825	IR
1N3825A	MOT
1N3826	IR
1N3826A	MOT
1N3827	IR
1N3827A	MOT
1N3828	IR
1N3828A	MOT
1N3829	IR
1N3829A	MOT
1N3830	MOT
1N3830A	MOT
1N3879	MOT
1N3880	MOT
1N3881	MOT
1N3882	MOT
1N3889	MOT
1N3890	MOT
1N3891	MOT
1N3900	MOT
1N3901	MOT
1N3909	MOT
1N3910	MOT
1N3987	IR
1N3988	IR
1N3989	IR
1N3990	IR
1N3993	MOT
1N3993A	MOT
1N3994	MOT
1N3994A	MOT
1N3995	MOT
1N3995A	MOT
1N3996	MOT
1N3997	MOT
1N3998	MOT
1N3999	MOT
1N4000	MOT
1N4000A	MOT
1N4001	MOT
1N4002	MOT
1N4003	MOT
1N4004	MOT
1N4005	MOT
1N4006	MOT
1N4007	MOT
1N4099	MOT

	Mfr.	EACH
	MOT	3.85
	MOT	3.85
	MOT	3.85
	MOT	3.85
	MOT	3.85
	MOT	3.85
	MOT	3.85
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	MOT	3.85
	MOT	3.85
	MOT	3.85
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	MOT	3.85
	MOT	3.85
	MOT	3.85
	MOT	3.85
	MOT	3.85
	MOT	5.05
	MOT	5.05
	MOT	5.05
	MOT	5.05
	MOT	5.05
	MOT	5.05
	SYL	.35
	SYL	.45
	SYL	.80
	SYL	.65
	SYL	.40
	TI	1.05
	MOT	2.00
	MOT	2.75
	MOT	2.00
	MOT	2.75
	MOT	2.00
	MOT	2.75
	SYL	.48
	SYL	.58
	SYL	.78
	VA	4.15
	VA	5.45
	VA	7.45
	VA	2.01
	SYL	.40
	SYL	.50
	SYL	.80
	SYL	.50
	SYL	.35
	MOT	6.05
	MOT	6.05
	MOT	6.05
	MOT	6.05
	MOT	6.05
	MOT	6.05
	MOT	6.05
	MOT	6.05
	MOT	6.05
	MOT	7.30
	SYL	1.20
	SYL	2.70
	MOT	.66
	MOT	.73
	MOT	.82
	MOT	1.12
	MOT	1.50
	MOT	2.25
	MOT	3.35
	MOT	1.26
A	MOT	1.93
	MOT	1.26
A	MOT	1.93
	MOT	1.26
A	MOT	1.93
	MOT	1.26
A	MOT	1.93
	MOT	1.26
A	MOT	1.93
	MOT	1.26
A	MOT	1.93
	MOT	1.26
A	MOT	1.93
	MOT	1.26
A	MOT	1.93
	MOT	1.26
A	MOT	1.93
	MOT	1.26
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A	MOT	1.93
	MOT	1.26
A	MOT	1.93
	MOT	1.26
A	MOT	1.93
	MOT	1.26
A	MOT	1.93
	MOT	1.26
A	MOT	1.93
	MOT	1.26
A	MOT	1.93
	MOT	1.26
A	MOT	1.93

Type	Mfr.	EACH
1N4747	MOT	1.26
1N4747A	MOT	1.93
1N4748	MOT	1.26
1N4748A	MOT	1.93
1N4749	MOT	1.26
1N4749A	MOT	1.93
1N4750	MOT	1.26
1N4750A	MOT	1.93
1N4751	MOT	1.26
1N4751A	MOT	1.93
1N4752	MOT	1.26
1N4752A	MOT	1.93
1N4753	MOT	1.26
1N4753A	MOT	1.93
1N4754	MOT	1.26
1N4754A	MOT	1.93
1N4755	MOT	1.26
1N4755A	MOT	1.93
1N4756	MOT	1.26
1N4756A	MOT	1.93
1N4757	MOT	1.26
1N4757A	MOT	1.93
1N4758	MOT	1.26
1N4758A	MOT	1.93
1N4759	MOT	1.26
1N4759A	MOT	1.93
1N4760	MOT	1.26
1N4760A	MOT	1.93
1N4761	MOT	1.26
1N4761A	MOT	1.93
1N4762	MOT	1.26
1N4762A	MOT	1.93
1N4763	MOT	1.26
1N4763A	MOT	1.93
1N4764	MOT	1.26
1N4764A	MOT	1.93
1N4770	MOT	5.85
1N4785	RCA	1.08
1N4816	IR	.24
1N4817	IR	.28
1N4818	IR	.32
1N4819	IR	.37
1N4820	IR	.41
1N4821	IR	.45
1N4822	IR	.50
1N4933	MOT	1.12
1N4934	MOT	1.42
1N4935	MOT	1.65
1N4936	MOT	2.45
1N4937	MOT	3.90
1N4997	MOT	.66
1N4998	MOT	.73
1N4999	MOT	.82
1N5000	MOT	1.12
1N5001	MOT	1.50
1N5002	MOT	2.25
1N5003	MOT	3.35
1N5052	IR	.70
1N5053	IR	.85
1N5054	IR	1.20
1N5139	MOT	5.85
1N5140	MOT	5.85
1N5141	MOT	5.85
1N5142	MOT	5.85
1N5143	MOT	5.85
1N5144	MOT	5.85
1N5145	MOT	5.85
1N5146	MOT	5.85
1N5147	MOT	5.85
1N5148	MOT	5.85
1N5211	RCA	.38
1N5212	RCA	.42
1N5213	RCA	.56
1N5214	RCA	.81
1N5215	RCA	.42
1N5216	RCA	.45
1N5217	RCA	.60
1N5218	RCA	.85
1N5221	MOT	.67
1N5221A	MOT	.90
1N5222	MOT	.67
1N5222A	MOT	.90
1N5223	MOT	.67
1N5223A	MOT	.90
1N5224	MOT	.67
1N5224A	MOT	.90
1N5225	MOT	.67
1N5225A	MOT	.90
1N5226	MOT	.67
1N5226A	MOT	.90
1N5227	MOT	.67
1N5227A	MOT	.90
1N5228	MOT	.67
1N5228A	MOT	.90
1N5229	MOT	.67
1N5229A	MOT	.90
1N5230	MOT	.67
1N5230A	MOT	.90
1N5231	MOT	.67
1N5231A	MOT	.90
1N5232	MOT	.67
1N5232A	MOT	.90
1N5233	MOT	.67
1N5233A	MOT	.90
1N5234	MOT	.67

Type	Mfr.	EACH
1N5234A	MOT	.90
1N5235	MOT	.67
1N5235A	MOT	.90
1N5236	MOT	.67
1N5236A	MOT	.90
1N5237	MOT	.67
1N5237A	MOT	.90
1N5238	MOT	.67
1N5238A	MOT	.90
1N5239	MOT	.67
1N5239A	MOT	.90
1N5240	MOT	.67
1N5240A	MOT	.90
1N5241	MOT	.67
1N5241A	MOT	.90
1N5242	MOT	.67
1N5242A	MOT	.90
1N5243	MOT	.67
1N5243A	MOT	.90
1N5244	MOT	.67
1N5244A	MOT	.90
1N5245	MOT	.67
1N5245A	MOT	.90
1N5246	MOT	.67
1N5246A	MOT	.90
1N5247	MOT	.67
1N5247A	MOT	.90
1N5248	MOT	.67
1N5248A	MOT	.90
1N5249	MOT	.67
1N5249A	MOT	.90
1N5250	MOT	.67
1N5250A	MOT	.90
1N5251	MOT	.67
1N5251A	MOT	.90
1N5252	MOT	.67
1N5252A	MOT	.90
1N5253	MOT	.67
1N5253A	MOT	.90
1N5254	MOT	.67
1N5254A	MOT	.90
1N5255	MOT	.67
1N5255A	MOT	.90
1N5256	MOT	.67
1N5256A	MOT	.90
1N5257	MOT	.67
1N5257A	MOT	.90
1N5258	MOT	.90
1N5258A	MOT	1.12
1N5259	MOT	.90
1N5259A	MOT	1.12
1N5260	MOT	.90
1N5260A	MOT	1.12
1N5261	MOT	.90
1N5261A	MOT	1.12
1N5262	MOT	.90
1N5262A	MOT	1.12
1N5263	MOT	.90
1N5263A	MOT	1.12
1N5264	MOT	.90
1N5264A	MOT	1.12
1N5265	MOT	.90
1N5265A	MOT	1.12
1N5266	MOT	.90
1N5266A	MOT	1.12
1N5267	MOT	.90
1N5267A	MOT	1.12
1N5268	MOT	.90
1N5268A	MOT	1.12
1N5269	MOT	.90
1N5269A	MOT	1.12
1N5270	MOT	.90
1N5270A	MOT	1.12
1N5271	MOT	1.27
1N5271A	MOT	1.50
1N5272	MOT	1.27
1N5272A	MOT	1.50
1N5273	MOT	1.27
1N5273A	MOT	1.50
1N5274	MOT	1.27
1N5274A	MOT	1.50
1N5275	MOT	1.27
1N5275A	MOT	1.50
1N5276	MOT	1.27
1N5276A	MOT	1.50
1N5277	MOT	1.27
1N5277A	MOT	1.50
1N5278	MOT	1.27
1N5278A	MOT	1.50
1N5279	MOT	1.27
1N5279A	MOT	1.50
1N5280	MOT	1.27
1N5280A	MOT	1.50
1N5281	MOT	1.27
1N5281A	MOT	1.50
1N5283	MOT	4.45
1N5284	MOT	4.45
1N5285	MOT	4.45
1N5286	MOT	4.45
1N5287	MOT	4.45
1N5288	MOT	4.45
1N5289	MOT	4.45
1N5290	MOT	4.45
1N5291	MOT	4.45
1N5292	MOT	4.45

Type	Mfr.	EACH
1N5293	MOT	4.45
1N5294	MOT	4.45
1N5295	MOT	4.45
1N5296	MOT	4.45
1N5297	MOT	4.45
1N5298	MOT	4.45
1N5299	MOT	4.45
1N5300	MOT	4.45
1N5301	MOT	4.45
1N5302	MOT	4.45
1N5303	MOT	4.45
1N5304	MOT	4.45
1N5305	MOT	4.45
1N5306	MOT	4.45
1N5307	MOT	4.45
1N5308	MOT	4.45
1N5309	MOT	4.45
1N5310	MOT	4.45
1N5311	MOT	4.45
1N5312	MOT	4.45
1N5313	MOT	4.45
1N5314	MOT	4.45
1N5333A	MOT	2.20
1N5334A	MOT	2.20
1N5335A	MOT	2.20
1N5336A	MOT	2.20
1N5337A	MOT	2.20
1N5338A	MOT	2.20
1N5339A	MOT	2.20
1N5340A	MOT	2.20
1N5341A	MOT	2.20
1N5342A	MOT	2.20
1N5343A	MOT	2.20
1N5344A	MOT	2.20
1N5345A	MOT	2.20
1N5346A	MOT	2.20
1N5347A	MOT	2.20
1N5348A	MOT	2.20
1N5349A	MOT	2.20
1N5350A	MOT	2.20
1N5351A	MOT	2.20
1N5352A	MOT	2.20
1N5353A	MOT	2.20
1N5354A	MOT	2.20
1N5355A	MOT	2.20
1N5356A	MOT	2.20
1N5357A	MOT	2.20
1N5358A	MOT	2.20
1N5359A	MOT	2.20
1N5360A	MOT	2.20
1N5361A	MOT	2.20
1N5362A	MOT	2.20
1N5363A	MOT	2.20
1N5364A	MOT	2.20
1N5365A	MOT	2.20
1N5366A	MOT	2.20
1N5367A	MOT	2.20
1N5368A	MOT	2.20
1N5369A	MOT	2.20
1N5370A	MOT	2.20
1N5371A	MOT	2.20
1N5372A	MOT	2.20
1N5373A	MOT	2.20
1N5374A	MOT	2.20
1N5375A	MOT	2.20
1N5376A	MOT	2.20
1N5377A	MOT	2.20
1N5378A	MOT	2.20
1N5379A	MOT	2.60
1N5380A	MOT	2.60
1N5381A	MOT	2.60
1N5382A	MOT	2.60
1N5383A	MOT	2.60
1N5384A	MOT	2.60
1N5385A	MOT	2.60
1N5386A	MOT	2.60
1N5387A	MOT	2.60
1N5388A	MOT	2.60
1N5411	RCA	.61
2N109	RCA	.66
2N173	MOT	3.40
2N174	MOT	3.60
2N174A	MOT	3.80
2N176	MOT	1.20
2N178	MOT	1.10
2N217	RCA	.57
2N242	MOT	1.65
2N251A	TI	1.88
2N270	RCA	.76
2N274	RCA	1.24
2N277	MOT	2.25
2N278	MOT	2.80
2N297A	MOT	1.60
2N307	MOT	1.12
2N320	MOT	.75
2N321	MOT	.83
2N322	MOT	.53
2N323	MOT	.75
2N324	MOT	.75
2N332	TI	4.65
2N333	TI	4.65
2N334	TI	4.65
2N335	TI	4.90
2N335A	TI	5.20
2N336	TI	5.95

Type	Mfr.	EACH
2N336A	TI	6.25
2N337	TI	4.85
2N338	TI	5.50
2N350A	MOT	1.65
2N351A	MOT	1.70
2N370	RCA	1.08
2N372	RCA	1.06
2N375	MOT	2.20
2N376A	MOT	1.85
2N378	MOT	1.80
2N379	MOT	1.90
2N381	MOT	1.28
2N382	MOT	1.73
2N383	MOT	2.18
2N384	RCA	1.65
2N388	RCA	.47
2N388A	RCA	.88
2N395	TI	.50
2N398	RCA	.83
2N398A	RCA	.91
2N398B	RCA	1.16
2N404	RCA	.42
2N404A	RCA	.55
2N405	RCA	.48
2N406	RCA	.41
2N407	RCA	.54
2N408	RCA	.48
2N409	RCA	.55
2N410	RCA	.48
2N412	RCA	.53
2N414	RCA	.42
2N441	MOT	1.26
2N442	MOT	1.66
2N443	MOT	1.90
2N456A	MOT	1.80
2N456B	TI	1.80
2N457A	TI	2.18
2N457B	TI	2.18
2N458A	TI	2.63
2N458B	TI	2.63
2N459	MOT	4.35
2N460	MOT	2.25
2N461	MOT	2.25
2N464	MOT	1.88
2N465	MOT	1.88
2N466	MOT	2.10
2N467	MOT	2.55
2N489	TI	7.10
2N489B	TI	9.15
2N501	SPR	6.35
2N502	SPR	2.90
2N502A	MOT	3.75
2N502B	MOT	4.20
2N508	MOT	.75
2N508A	MOT	.90
2N524	MOT	1.20
2N525	MOT	1.20
2N526	MOT	1.20
2N527	MOT	1.43
2N554	MOT	.60
2N555	MOT	.75
2N581	RCA	.50
2N582	RCA	.66
2N585	RCA	.99
2N586	RCA	1.73
2N588	SPR	1.45
2N591	RCA	.58
2N618	MOT	2.45
2N647	RCA	1.08
2N649	RCA	.86
2N650	MOT	2.03
2N650A	MOT	2.10
2N651	MOT	2.03
2N651A	MOT	2.10
2N652	MOT	2.30
2N652A	MOT	2.80
2N653	MOT	2.50
2N654	MOT	2.60
2N655	MOT	2.80
2N656	TI	2.03
2N657	TI	2.20
2N660	TI	1.48
2N662	TI	1.40
2N669	MOT	1.42
2N681	MOT	3.30
2N682	MOT	4.10
2N683	MOT	5.60
2N684	MOT	6.30
2N685	MOT	6.60
2N686	MOT	6.95
2N696	MOT	.52
2N697	MOT	.52
2N698	TI	1.57
2N699	RCA	1.16
2N700	MOT	7.35
2N705	MOT	1.03
2N706	MOT	.46
2N706A	MOT	1.18
2N706B	MOT	1.48
2N707	MOT	6.30
2N708	MOT	.49
2N709	RCA	1.32
2N710	MOT	1.33

Type	Mfr.	EACH
2N711	MOT	.88
2N711A	MOT	.88
2N711B	MOT	.94
2N717	TI	.99
2N718	MOT	.46
2N718A	MOT	.79
2N719	TI	2.35
2N720	TI	1.32
2N722	MOT	1.46
2N726	TI	3.00
2N730	TI	.99
2N735	TI	2.50
2N736	TI	2.50
2N741	MOT	2.18
2N741A	MOT	3.30
2N743	TI	1.95
2N744	MOT	2.90
2N753	MOT	1.97
2N760	TI	1.80
2N769	SPR	6.75
2N779A	SPR	3.50
2N797	TI	4.27
2N828	MOT	3.30
2N834	MOT	2.00
2N835	MOT	1.50
2N859	SPR	9.35
2N861	SPR	6.00
2N863	SPR	4.50
2N869	MOT	5.85
2N870	TI	5.25
2N871	TI	5.25
2N877	TI	3.00
2N914	MOT	.95
2N916	MOT	3.65
2N917	RCA	1.27
2N918	MOT	3.30
2N929	MOT	2.25
2N930	MOT	2.60
2N956	MOT	.85
2N960	MOT	.96
2N961	MOT	.91
2N962	MOT	.85
2N963	MOT	.82
2N964	MOT	.99
2N965	MOT	.94
2N966	MOT	.88
2N967	MOT	.87
2N968	MOT	.90
2N970	MOT	.81
2N973	TI	.89
2N974	TI	.83
2N976	SPR	4.35
2N984	SPR	1.00
2N985	MOT	2.88
2N995	MOT	5.85
2N1008	MOT	1.10
2N1008A	MOT	1.20
2N1011	MOT	1.95
2N1021A	TI	3.08
2N1022	MOT	3.60
2N1022A	TI	3.60
2N1023	RCA	2.72
2N1038	TI	1.80
2N1039	TI	2.40
2N1040	TI	3.60
2N1041	TI	4.50
2N1042	TI	2.85
2N1043	TI	4.20
2N1046	TI	8.25
2N1073	MOT	2.40
2N1099	MOT	3.90
2N1100	MOT	4.50
2N1131	MOT	5.60
2N1132	MOT	1.46
2N1141	MOT	4.83
2N1142	MOT	4.20
2N1143	MOT	3.50
2N1162	MOT	4.45
2N1164	MOT	6.35
2N1165	MOT	6.35
2N1166	MOT	7.55
2N1167	MOT	7.55
2N1175	MOT	1.12
2N1177	RCA	1.01
2N1178	RCA	.99
2N1179	RCA	.99
2N1180	RCA	.80
2N1183	RCA	1.82
2N1183A	RCA	2.31
2N1183B	RCA	2.89
2N1184	RCA	2.48
2N1184A	RCA	2.81
2N1184B	RCA	4.13
2N1185	MOT	3.60
2N1186	MOT	3.80
2N1187	MOT	3.80
2N1188	MOT	4.70
2N1189	MOT	2.25
2N1191	MOT	1.40
2N1192	MOT	1.40
2N1193	MOT	1.87
2N1194	MOT	2.03
2N1195	MOT	3.95

Type	Mfr.	EACH
2N1204	MOT	1.65
2N1224	RCA	1.24
2N1225	RCA	1.41
2N1226	RCA	1.49
2N1252	TI	6.90
2N1277	TI	4.25
2N1278	TI	4.75
2N1302	RCA	.42
2N1303	RCA	.42
2N1304	RCA	.50
2N1305	RCA	.48
2N1306	RCA	.62
2N1307	RCA	.58
2N1308	RCA	.91
2N1309	RCA	.91
2N1358	MOT	4.15
2N1359	MOT	1.40
2N1360	MOT	1.70
2N1362	MOT	2.85
2N1363	MOT	3.10
2N1364	MOT	4.75
2N1365	MOT	5.00
2N1370	TI	.72
2N1371	TI	1.14
2N1372	TI	.81
2N1373	TI	1.20
2N1374	TI	1.02
2N1375	TI	1.38
2N1376	TI	1.29
2N1377	TI	1.50
2N1378	TI	1.29
2N1379	TI	1.44
2N1381	TI	.72
2N1395	RCA	1.82
2N1396	RCA	1.93
2N1397	RCA	2.15
2N1404	TI	.58
2N1412	MOT	4.50
2N1413	MOT	.83
2N1414	MOT	.90
2N1415	MOT	1.05
2N1420	MOT	.65
2N1479	RCA	2.15
2N1480	RCA	2.31
2N1481	RCA	2.48
2N1482	RCA	3.30
2N1483	RCA	2.89
2N1484	RCA	3.63
2N1485	RCA	4.46
2N1486	RCA	6.77
2N1487	RCA	4.54
2N1488	RCA	4.95
2N1489	RCA	7.43
2N1490	RCA	8.25
2N1491	RCA	1.82
2N1493	RCA	7.01
2N1494	MOT	2.17
2N1495	MOT	3.30
2N1496	MOT	3.80
2N1499A	SPR	1.40
2N1499B	SPR	1.55
2N1500	SPR	6.95
2N1507	TI	1.20
2N1524	RCA	.47
2N1529	MOT	1.45
2N1530	MOT	1.60
2N1531	MOT	2.30
2N1532	MOT	3.00
2N1533	MOT	4.35
2N1534	MOT	1.40
2N1535	MOT	1.50
2N1536	MOT	1.70
2N1537	MOT	3.90
2N1538	MOT	5.50
2N1539	MOT	1.50
2N1540	MOT	1.58
2N1541	MOT	1.85
2N1542	MOT	2.35
2N1543	MOT	3.60
2N1544	MOT	1.65
2N1545	MOT	1.85
2N1546	MOT	2.30
2N1547	MOT	2.75
2N1548	MOT	4.00
2N1550	MOT	3.05
2N1551	MOT	4.85
2N1553	MOT	1.85
2N1554	MOT	2.30
2N1555	MOT	2.75
2N1556	MOT	4.00
2N1557	MOT	2.15
2N1558	MOT	2.80
2N1559	MOT	3.25
2N1560	MOT	4.45
2N1564	TI	2.50
2N1565	TI	2.50
2N1566	TI	2.50
2N1595	MOT	2.15
2N1596	MOT	2.60
2N1597	MOT	4.95
2N1600	IR	5.10
2N1601	IR	5.70
2N1605	RCA	.62
2N1605A	RCA	1.09
2N1613	RCA	.75

Type	Mfr.	EACH
2N1631	RCA	.65
2N1632	RCA	.58
2N1637	RCA	.57
2N1638	RCA	.50
2N1639	RCA	.53
2N1671	TI	2.95
2N1671A	TI	3.20
2N1671B	TI	3.55
2N1700	RCA	1.90
2N1701	RCA	2.31
2N1702	RCA	4.54
2N1707	MOT	.83
2N1711	RCA	.94
2N1714	TI	6.00
2N1715	TI	8.25
2N1718	TI	6.75
2N1719	TI	9.00
2N1726	SPR	1.15
2N1742	MOT	2.70
2N1743	SPR	2.87
2N1744	SPR	2.25
2N1745	SPR	1.80
2N1748	SPR	1.05
2N1748A	SPR	1.15
2N1754	SPR	1.35
2N1770	TI	4.05
2N1771	TI	4.65
2N1771A	IR	6.97
2N1772	TI	5.75
2N1773	IR	6.92
2N1842	MOT	3.00
2N1842A	MOT	3.15
2N1843	MOT	3.75
2N1843A	MOT	4.05
2N1844	MOT	5.00
2N1845	MOT	5.70
2N1846	MOT	6.00
2N1847	MOT	6.30
2N1890	TI	5.30
2N1893	RCA	1.08
2N1905	RCA	4.13
2N1906	RCA	6.60
2N1907	TI	7.88
2N1924	MOT	1.80
2N1925	MOT	2.03
2N1926	MOT	2.40
2N1970	MOT	2.35
2N1973	TI	2.37
2N1974	TI	2.37
2N1975	TI	5.30
2N1991	MOT	3.95
2N1995	TI	3.75
2N1996	TI	5.14
2N1997	TI	1.77
2N1999	TI	2.07
2N2000	TI	2.50
2N2001	TI	2.17
2N2015	RCA	9.08
2N2016	RCA	9.90
2N2042	MOT	2.85
2N2043	MOT	3.20
2N2048	MOT	1.60
2N2076	MOT	3.60
2N2077	MOT	2.85
2N2078	MOT	1.90
2N2079	MOT	7.20
2N2080	MOT	5.10
2N2081	MOT	3.15
2N2102	RCA	1.13
2N2138	MOT	2.10
2N2139	MOT	2.25
2N2140	MOT	3.90
2N2141	MOT	7.85
2N2142	MOT	2.30
2N2143	MOT	2.45
2N2144	MOT	3.75
2N2145	MOT	4.50
2N2147	RCA	1.57
2N2148	RCA	1.08
2N2152	MOT	3.60
2N2153	MOT	5.55
2N2156	MOT	4.10
2N2157	MOT	6.35
2N2160	TI	1.49
2N2171	MOT	1.95
2N2188	TI	1.28
2N2189	TI	1.64
2N2190	TI	1.47
2N2191	TI	1.85
2N2192	MOT	4.20
2N2193	MOT	2.90
2N2194	MOT	2.18
2N2195	MOT	1.38
2N2217	MOT	3.35
2N2218	MOT	.75
2N2219	MOT	1.05
2N2219A	MOT	5.25
2N2220	TI	3.35
2N2221	MOT	.75
2N2222	MOT	1.05
2N2243	TI	4.80
2N2256	MOT	1.12
2N2257	MOT	1.27
2N2258	MOT	1.12
2N2259	MOT	1.27

Type	Mfr.	EACH
2N2270	RCA	.91
2N2280	SPR	4.50
2N2322	MOT	2.30
2N2323	MOT	2.85
2N2324	MOT	3.75
2N2325	MOT	4.95
2N2326	MOT	5.40
2N2330	SPR	4.35
2N2360	SPR	3.95
2N2361	SPR	3.30
2N2362	SPR	2.10
2N2368	MOT	1.07
2N2369	MOT	1.07
2N2382	MOT	5.15
2N2386	TI	2.70
2N2398	SPR	3.90
2N2400	SPR	1.25
2N2402	SPR	2.25
2N2405	RCA	1.57
2N2411	TI	3.15
2N2412	TI	6.00
2N2415	MOT	6.00
2N2475	RCA	1.62
2N2476	RCA	1.16
2N2477	RCA	1.32
2N2490	MOT	1.88
2N2492	MOT	3.38
2N2493	MOT	6.00
2N2501	MOT	4.70
2N2527	MOT	9.30
2N2537	MOT	4.95
2N2538	MOT	5.85
2N2552	TI	1.88
2N2553	TI	2.48
2N2557	TI	2.48
2N2564	TI	3.00
2N2574	MOT	3.90
2N2575	MOT	5.00
2N2576	MOT	5.70
2N2586	TI	6.00
2N2604	MOT	3.50
2N2605	MOT	4.00
2N2613	RCA	.55
2N2614	RCA	.50
2N2631	RCA	3.47
2N2635	TI	.94
2N2646	MOT	2.10
2N2647	MOT	3.00
2N2659	TI	1.65
2N2660	TI	1.95
2N2661	TI	2.85
2N2662	TI	1.65
2N2663	TI	2.40
2N2708	RCA	2.31
2N2800	MOT	6.75
2N2801	MOT	7.10
2N2804	MOT	7.00
2N2807	MOT	6.00
2N2832	MOT	4.50
2N2833	MOT	4.85
2N2834	MOT	5.25
2N2838	MOT	7.10
2N2845	SPR	4.95
2N2848	SPR	5.85
2N2857	MOT	4.05
2N2869/2N301	RCA	1.52
2N2870/2N301A	RCA	3.15
2N2894	MOT	1.95
2N2895	RCA	1.41
2N2896	MOT	2.06
2N2897	RCA	1.16
2N2904	MOT	1.90
2N2904A	MOT	4.90
2N2905	MOT	1.90
2N2906	MOT	1.90
2N2907	MOT	1.90
2N2914	MOT	3.40
2N2929	MOT	6.75
2N2944	MOT	2.76
2N2945	MOT	2.52
2N2946	MOT	2.88
2N2951	MOT	4.50
3N2953	RCA	.50
2N2955	MOT	2.48
2N2956	MOT	2.63
2N2957	MOT	3.37
2N2958	MOT	2.25
2N2959	MOT	2.70
2N2996	TI	1.43
2N2997	TI	3.08
2N3005	TI	3.30
2N3009	MOT	1.98
2N3011	RCA	.99
2N3013	MOT	7.00
2N3014	MOT	3.60
2N3015	MOT	1.93
2N3019	MOT	6.00
2N3020	MOT	5.70
2N3036	TI	5.50
2N3053	RCA	.75
2N3054	RCA	1.16
2N3055	RCA	1.82
2N3114	MOT	6.00
2N3115	MOT	1.95
2N3116	MOT	2.40

Type	Mfr.	E
2N3118	RCA	
2N3119	RCA	
2N3127	MOT	
2N3133	MOT	
2N3134	MOT	
2N3135	MOT	
2N3136	MOT	
2N3146	TI	
2N3217	SPR	
2N3218	SPR	
2N3219	SPR	
2N3227	MOT	
2N3228	RCA	
2N3232	MOT	
2N3235	MOT	
2N3241A	RCA	
2N3242A	RCA	
2N3248	MOT	
2N3249	MOT	
2N3250	MOT	
2N3251	MOT	
2N3261	RCA	
2N3279	MOT	
2N3280	MOT	
2N3282	MOT	
2N3283	MOT	
2N3284	MOT	
2N3286	MOT	
2N3287	MOT	
2N3288	MOT	
2N3290	MOT	
2N3293	MOT	
2N3294	MOT	
2N3295	MOT	
2N3298	MOT	
2N3299	MOT	
2N3300	MOT	
2N3301	MOT	
2N3302	MOT	
2N3304	MOT	
2N3323	MOT	
2N3324	MOT	
2N3325	MOT	
2N3427	MOT	
2N3428	MOT	
2N3439	RCA	
2N3440	RCA	
2N3441	RCA	
2N3442	RCA	
2N3478	RCA	
2N3504	TI	
2N3505	TI	
2N3509	MOT	
2N3510	MOT	
2N3511	MOT	
2N3512	RCA	
2N3525	RCA	
2N3528	RCA	
2N3529	RCA	
2N3546	MOT	
2N3553	RCA	
2N3559	TI	
2N3583	RCA	
2N3584	RCA	
2N3585	RCA	
2N3600	RCA	
2N3611	MOT	
2N3612	MOT	
2N3613	MOT	
2N3614	MOT	
2N3615	MOT	
2N3616	MOT	
2N3617	MOT	
2N3618	MOT	
2N3647	MOT	
2N3648	MOT	
2N3668	RCA	
2N3669	RCA	
2N3670	RCA	
2N3702	TI	
2N3703	TI	
2N3704	TI	
2N3705	TI	
2N3706	TI	
2N3707	TI	
2N3708	TI	
2N3709	TI	
2N3710	TI	
2N3711	TI	
2N3712	MOT	
2N3713	MOT	
2N3714	MOT	
2N3715	MOT	
2N3716	MOT	
2N3730	RCA	
2N3731	RCA	
2N3732	RCA	
2N3734	MOT	
2N3735	MOT	
2N3736	MOT	
2N3737	MOT	
2N3738	MOT	
2N3739	MOT	
2N3740	MOT	
2N3741	MOT	

Mfr.	EACH
MOT	7.50
MOT	7.50
MOT	8.25
MOT	2.10
MOT	2.30
RCA	4.13
RCA	4.13
MOT	3.75
MOT	3.75
MOT	6.15
MOT	6.75
TI	.56
TI	.72
MOT	2.77
MOT	2.55
MOT	2.40
RCA	2.97
RCA	3.88
RCA	4.54
RCA	6.11
RCA	8.22
RCA	4.95
RCA	6.60
RCA	4.37
RCA	5.03
RCA	6.60
RCA	8.75
MOT	.75
MOT	.82
MOT	.75
TI	2.00
MOT	4.00
RCA	1.40
RCA	1.62
MOT	2.40
MOT	2.75
MOT	5.15
MOT	3.40
RCA	1.32
RCA	1.16
TI	.35
TI	.29
TI	.30
TI	.32
TI	.34
RCA	3.80
RCA	1.90
RCA	1.34
MOT	2.25
MOT	2.70
RCA	.73
MOT	5.25
MOT	4.00
MOT	3.45
RCA	3.05
RCA	2.64
RCA	5.12
MOT	.52
MOT	.60
MOT	.52
MOT	.60
MOT	1.45
MOT	1.60
MOT	1.75
MOT	1.95
MOT	2.40
MOT	2.80
MOT	1.60
MOT	1.95
MOT	2.80
MOT	1.60
MOT	1.75
MOT	1.90
MOT	2.10
MOT	2.55
MOT	2.95
MOT	5.15
MOT	6.90
MOT	1.60
MOT	1.90
MOT	2.10
MOT	2.55
MOT	2.95
MOT	6.90
MOT	1.59
MOT	1.74
MOT	1.89
MOT	2.09
MOT	2.54
MOT	2.94
MOT	5.14
MOT	6.89
MOT	1.59
MOT	1.74
MOT	1.89
MOT	2.09
MOT	2.54
MOT	2.94
MOT	6.89
MOT	2.15
MOT	2.60
MOT	3.30
MOT	4.50
MOT	4.95
MOT	2.25

Type	Mfr.	EACH
2N4221	MOT	2.17
2N4222	MOT	2.17
2N4223	MOT	2.25
2N4224	MOT	2.10
2N4231	MOT	2.10
2N4232	MOT	2.40
2N4233	MOT	3.20
2N4234	MOT	3.00
2N4235	MOT	3.60
2N4236	MOT	4.00
2N4237	MOT	2.25
2N4238	MOT	2.75
2N4239	MOT	3.05
2N4240	RCA	2.89
2N4252	TI	1.85
2N4254	TI	.90
2N4255	TI	.85
2N4259	RCA	1.90
2N4264	MOT	.48
2N4265	MOT	.54
2N4276	MOT	3.50
2N4298	RCA	3.71
2N4299	RCA	4.13
2N4314	RCA	1.24
2N4346	RCA	2.31
2N4347	RCA	2.97
2N4348	RCA	4.13
2N4351	MOT	5.25
2N4352	MOT	5.25
2N4383	SPR	1.05
2N4384	SPR	1.05
2N4390	RCA	.75
2N4391	MOT	6.45
2N4392	MOT	4.95
2N4393	MOT	5.70
2N4400	MOT	.60
2N4401	MOT	.75
2N4402	MOT	.60
2N4403	MOT	.75
2N4409	MOT	.67
2N4410	MOT	.96
2N4427	RCA	2.15
2N4441	MOT	1.20
2N4442	MOT	1.50
2N4443	MOT	2.00
2N4444	MOT	4.50
2N4851	MOT	1.10
2N4852	MOT	1.10
2N4853	MOT	2.25
2N4870	MOT	.75
2N4871	MOT	.68
2N4890	MOT	1.12
2N4898	MOT	1.95
2N4899	MOT	2.60
1N4900	MOT	2.90
2N4901	MOT	2.75
2N4902	MOT	3.30
2N4903	MOT	4.25
2N4904	MOT	3.35
2N4905	MOT	4.45
2N4906	MOT	5.60
2N4910	MOT	1.55
2N4911	MOT	1.80
2N4912	MOT	2.10
2N4913	MOT	2.40
2N4914	MOT	2.60
2N4915	MOT	4.20
2N4918	MOT	1.65
2N4919	MOT	1.90
2N4920	MOT	2.25
2N4921	MOT	1.33
2N4922	MOT	1.48
2N4923	MOT	1.80
2N4928	MOT	4.05
2N4929	MOT	4.95
2N4930	MOT	5.90
2N4931	MOT	6.75
2N4937	MOT	7.15
2N4938	MOT	5.70
2N4939	MOT	3.40
2N4942	MOT	8.85
2N4948	MOT	1.35
2N4949	MOT	2.40
2N4959	MOT	6.75
2N5034	RCA	1.34
2N5035	RCA	1.32
2N5036	RCA	1.42
2N5037	RCA	1.41
2N5060	MOT	.69
2N5061	MOT	.78
2N5062	MOT	.90
2N5063	MOT	.95
2N5067	MOT	1.80
2N5068	MOT	2.25
2N5069	MOT	2.85
2N5086	MOT	.75
2N5087	MOT	.81
2N5088	MOT	.75
2N5089	MOT	.98
2N5109	RCA	3.47
2N5164	MOT	3.30
2N5165	MOT	4.65
2N5166	MOT	6.45
2N5167	MOT	9.75
2N5168	MOT	3.70

Type	Mfr.	EACH
2N5169	MOT	5.00
2N5170	MOT	6.80
2N5179	RCA	.81
2N5180	RCA	.48
2N5182	RCA	.40
2N5183	RCA	.32
2N5184	RCA	.45
2N5185	RCA	.52
2N5186	RCA	.40
2N5187	RCA	.45
2N5188	RCA	.55
2N5189	RCA	.65
2N5190	MOT	1.57
2N5191	MOT	1.92
2N5192	MOT	2.50
2N5193	MOT	2.00
2N5194	MOT	2.25
2N5195	MOT	2.90
2N5202	RCA	4.53
2N5208	MOT	.54
2N5209	MOT	.66
2N5210	MOT	.72
2N5219	MOT	.28
2N5220	MOT	.27
2N5221	MOT	.30
2N5222	MOT	.24
2N5223	MOT	.21
2N5224	MOT	.24
2N5225	MOT	.27
2N5226	MOT	.30
2N5227	MOT	.24
2N5228	MOT	.28
2N5262	RCA	1.62
2N5265	MOT	5.25
2N5266	MOT	4.27
2N5267	MOT	3.97
2N5268	MOT	3.75
2N5269	MOT	3.97
2N5270	MOT	4.27
2N5293	RCA	.91
2N5294	RCA	.91
2N5295	RCA	.91
2N5296	RCA	.91
2N5297	RCA	1.04
2N5298	RCA	1.04
2N5320	RCA	2.15
2N5321	RCA	1.57
2N5322	RCA	2.15
2N5323	RCA	1.57
2N5324	MOT	4.50
2N5325	MOT	6.00
2N5358	MOT	4.50
2N5359	MOT	3.90
2N5360	MOT	3.45
2N5361	MOT	3.00
2N5362	MOT	3.45
2N5363	MOT	3.90
2N5364	MOT	4.50
2N5415	RCA	3.30
2N5416	RCA	4.95
2N5457	MOT	.90
2N5458	MOT	.82
2N5459	MOT	.90
2N5460	MOT	1.00
2N5461	MOT	.75
2N5462	MOT	1.00
2N5463	MOT	1.50
2N5464	MOT	1.20
2N5465	MOT	1.50
2N5471	MOT	8.25
2N5472	MOT	6.00
2N5473	MOT	4.50
2N5474	MOT	3.75
2N5475	MOT	2.70
2N5476	MOT	3.75
2N5484	MOT	1.05
2N5485	MOT	1.12
2N5486	MOT	1.20
2N5490	RCA	1.07
2N5491	RCA	1.07
2N5492	RCA	1.19
2N5493	RCA	1.19
2N5494	RCA	1.19
2N5495	RCA	1.19
2N5496	RCA	1.29
2N5497	RCA	1.29
2N5555	MOT	1.20
2N5567	RCA	3.38
2N5568	RCA	4.41
2N5569	RCA	3.88
2N5570	RCA	4.90
2N5571	RCA	3.47
2N5572	RCA	4.65
2N5573	RCA	3.96
2N5574	RCA	5.15
3N116	SPR	3.75
3N124	MOT	3.37
3N126	MOT	3.37
3N128	RCA	1.45
3N138	RCA	3.30
3N139	RCA	2.89
3N140	RCA	1.62
3N141	RCA	1.55
3N142	RCA	1.08
3N143	RCA	1.39

Type	Mfr.	EACH
3N152	RCA	1.78
3N153	RCA	1.58
3N154	RCA	1.62
3N155	MOT	6.30
3N156	MOT	6.30
3N157	MOT	6.30
3N158	MOT	6.30
3N159	RCA	2.18
1MA4	IR	.80
2F4	ST	.50
5A2	IR	.32
5A4	IR	.41
5A6	IR	.50
5A8	IR	.85
5A10	IR	1.20
5MA4	IR	.94
5MA6	IR	1.70
8D4	IR	.44
8D6	IR	.67
10B1	IR	.50
10B4	IR	.80
10D5	IR	.45
10D10	IR	1.20
18DB2A	IR	2.38
18DB6A	IR	2.90
18DB10A	IR	5.12
18DC6A	IR	2.30
18DJ2A	IR	2.10
18DJ6A	IR	2.30
18DJ10A	IR	2.60
60M	ST	.85
61-8969	IR	2.95
650C0	TI	4.85
650C3	TI	4.85
652C0	TI	4.85
652C5	TI	4.85
40022	RCA	.83
40050	RCA	.99
40084	RCA	.99
40108	RCA	.99
40109	RCA	1.16
40110	RCA	1.57
40208	RCA	.99
40231	RCA	.47
40232	RCA	.53
40233	RCA	.60
40234	RCA	.42
40235	RCA	.57
40238	RCA	.43
40242	RCA	.57
40245	RCA	.40
40246	RCA	.38
40250	RCA	1.16
40254	RCA	.78
40263	RCA	.50
40265	RCA	.35
40266	RCA	.29
40267	RCA	.33
40309	RCA	.70
40311	RCA	.73
40314	RCA	.78
40315	RCA	.75
40317	RCA	.78
40320	RCA	.78
40323	RCA	.70
40326	RCA	.78
40329	RCA	.47
40347	RCA	.66
40363	RCA	1.82
40395	RCA	.38
40396	RCA	.83
40398	RCA	.60
40429	RCA	2.06
40430	RCA	2.39
40431	RCA	2.56
40432	RCA	2.97
40485	RCA	2.06
40486	RCA	2.39
40504	RCA	1.78
40505	RCA	2.48
40506	RCA	3.22
40507	RCA	1.63
40508	RCA	2.01
40511	RCA	2.72
40512	RCA	3.14
40513	RCA	1.24
40514	RCA	1.26
40525	RCA	1.57
40526	RCA	1.62
40527	RCA	2.31
40528	RCA	1.57
40529	RCA	1.62
40530	RCA	2.31
A1B	IR	1.22
A1H	IR	.43
AF139	MOT	1.95
AF239	MOT	2.17
B1B	IR	1.28
B1H	IR	.40
C1B	IR	1.46
C1H	IR	.42
CR103	RCA	8.15
CR104	RCA	9.60
CR105	RCA	10.55
CR201	RCA	3.10

Type	Mfr.	EACH
CR203	RCA	4.80
CR204	RCA	5.75
CR208	RCA	8.40
DD170	IR	1.95
DD175	IR	.99
DD176	IR	.59
DD177	IR	.99
E075L	IR	.59
E150L	IR	.74
E300L	IR	1.10
E500L	IR	1.22
E650L	IR	2.08
F-8	ST	.52
FA8	ST	1.60
G129	TI	1.00
H11	TI	4.00
H35	TI	5.00
H38	TI	4.00
MOTOROLA HEP DEVICES See Page 504		
KD2501	RCA	.90
KD2503	RCA	1.08
KD2504	RCA	1.08
KD2505	RCA	1.08
M1B	IR	1.72
M1H	IR	.56
MDA920-4	MOT	2.30
MDA942-1	MOT	2.50
MDA942-2	MOT	2.80
MDA942-3	MOT	3.25
MDA942-5	MOT	4.20
MDA952-1	MOT	3.25
MDA952-2	MOT	3.50
MDA952-3	MOT	4.45
MJ400	MOT	1.65
MJ420	MOT	1.80
MJ421	MOT	1.85
MJ440	MOT	1.55
MJ2251	MOT	1.87
MJ2252	MOT	2.02
MJ3101	MOT	1.95
MJ3201	MOT	1.72
MJ3202	MOT	1.87
MJ4101	MOT	1.57
MK-10	MOT	.25
MK-15	MOT	.25
MK-20	MOT	.30
MM380	MOT	1.26
MM1139	MOT	1.35
MM4048	MOT	4.10
MM5000	MOT	4.40
MM5001	MOT	3.15
MM5002	MOT	2.25
MP500	MOT	5.70
MP504	MOT	6.60
MP505	MOT	10.20
MP505A	MOT	12.75
MP3730	MOT	1.58
MP3731	MOT	2.10
MPF102	MOT	.90
MPS2369	MOT	.53
MPS2711	MOT	.34
MPS2712	MOT	.32
MPS2715	MOT	.57
MPS2716	MOT	.60
MPS2926	MOT	.29
MPS3392	MOT	.32
MPS3393	MOT	.32
MPS3394	MOT	.27
MPS3395	MOT	.45
MPS3398	MOT	.57
MPS3702	MOT	.45
MPS3703	MOT	.39
MPS3704	MOT	.61
MPS3705	MOT	.57
MPS3706	MOT	.52
MPS3707	MOT	.60
MPS3708	MOT	.45
MPS3709	MOT	.45
MPS3710	MOT	.49
MPS3711	MOT	.54
MPS6511	MOT	.68
MPS6518	MOT	.67
MPS6519	MOT	.75
MPS6522	MOT	.90
MPS6523	MOT	.97
MPS6542	MOT	1.20
MPS6543	MOT	1.37
MPS6544	MOT	.54
MPS6545	MOT	.84
MPS6546	MOT	1.24
MPS6547	MOT	1.35
MPS6560	MOT	.78
MPS6561	MOT	.69
MPS6565	MOT	.52
MPS6566	MOT	.57
MPS6567	MOT	1.00
MPS6568	MOT	1.50
MPS6569	MOT	1.11
MPS6570	MOT	.96
MPT28	MOT	.67
MPT32	MOT	.67
MPT36	MOT	.68

Semiconductors, Rectifiers and Diodes

SEMICONDUCTOR DIRECTORY (CONT'D FROM PAGE 305) . . ORDERING INFORMATION ON PAGE 301

Type	Mfr.	EACH	Type	Mfr.	EACH	Type	Mfr.	EACH
MR322	MOT	.67	MV1636	MOT	1.42	SK-3026	RCA	1.80
MR322R	MOT	.67	MV1638	MOT	1.42	SK-3027	RCA	3.15
MR323	MOT	.76	MV1640	MOT	1.42	SK-3028	RCA	3.60
MR323R	MOT	.76	MV1642	MOT	1.42	SK-3029	RCA	6.30
MR324	MOT	1.11	MV1644	MOT	1.42	SK-3030	RCA	.42
MR324R	MOT	1.11	MV1646	MOT	1.42	SK-3031	RCA	.51
MR325	MOT	1.27	MV1650	MOT	1.42	SK-3032	RCA	.61
MR326	MOT	1.48	Q1B	IR	.41	SK-3033	RCA	.81
MR326R	MOT	1.48	Q4B	IR	1.56	ST-14C	IR	4.20
MR327	MOT	2.40	SD-94A	IR	.96	TI-40A4	TI	5.50
MR328	MOT	3.35	SD-95A	IR	1.06	TI-47	TI	.87
MR330	MOT	6.75	SK-3003	RCA	.99	TI-51	TI	.39
MR331	MOT	9.75	SK-3004	RCA	.99	TI-52	TI	.42
MR1033B	MOT	.93	SK-3005	RCA	1.17	TI-53	TI	.45
MR1120	MOT	1.03	SK-3006	RCA	1.41	TI-54	TI	.50
MR1337-1	MOT	3.35	SK-3007	RCA	1.26	TI-55	TI	.57
MR1337-2	MOT	4.95	SK-3008	RCA	1.23	TI-56	TI	.65
MR1337-3	MOT	6.75	SK-3009	RCA	2.34	TI-57	TI	.73
MR2266	MOT	1.08	SK-3010	RCA	1.26	TI-481	TI	1.90
MR2272	MOT	.57	SK-3011	RCA	1.62	TI-482	TI	2.10
MR2273	MOT	.48	SK-3012	RCA	4.38	TI-483	TI	2.30
MS-10	MOT	2.00	SK-3013	RCA	4.68	TI-484	TI	2.80
MU4891	MOT	.90	SK-3014	RCA	3.15	TI-487	TI	5.60
MU4892	MOT	1.23	SK-3015	RCA	6.30	TI-492	TI	1.55
MU4893	MOT	.96	SK-3016	RCA	.57	TI-493	TI	1.90
MU4894	MOT	1.05	SK-3017A	RCA	.60	TI-494	TI	2.50
MV1620	MOT	1.42	SK-3018	RCA	1.35	TI-495	TI	3.00
MV1622	MOT	1.42	SK-3019	RCA	1.47	TI-496	TI	1.75
MV1624	MOT	1.42	SK-3020	RCA	1.32	TIS37	TI	.38
MV1626	MOT	1.42	SK-3021	RCA	1.95	TIS38	TI	.35
MV1628	MOT	1.42	SK-3022	RCA	3.96	TIS43	TI	.76
MV1630	MOT	1.42	SK-3023	RCA	3.96	....	......	.....
MV1632	MOT	1.42	SK-3024	RCA	1.98		......	.....
MV1634	MOT	1.42	SK-3025	RCA	2.70	....	......	.....

Because of space limitations, only the most popular semiconductors are listed in this Directory—for a complete list of semiconductors stocked at Allied—ask for Directory No. 23 A 7901. It will be sent at no charge.

integrated circuit directory

Type	Mfr.	EACH	Type	Mfr.	EA
CA3000	RCA	3.80	CA3036	RCA	
CA3001	RCA	5.55	CA3037	RCA	
CA3002	RCA	3.71	CA3037A	RCA	
CA3004	RCA	3.71	CA3038	RCA	
CA3005	RCA	2.48	CA3038A	RCA	
CA3006	RCA	5.80	CA3039	RCA	
CA3007	RCA	5.35	CA3040	RCA	
CA3008	RCA	6.44	CA3041	RCA	
CA3008A	RCA	9.74	CA3042	RCA	
CA3010	RCA	2.61	CA3043	RCA	
CA3010A	RCA	4.79	CA3044	RCA	
CA3011	RCA	1.47	CA3044V1	RCA	
CA3012	RCA	1.82	CA3045	RCA	
CA3013	RCA	2.15	CA3046	RCA	
CA3014	RCA	2.48	CA3047	RCA	
CA3015	RCA	3.96	CA3047A	RCA	
CA3015A	RCA	6.44	CA3048	RCA	
CA3016	RCA	8.91	CA3049	RCA	
CA3016A	RCA	11.39	CA3050	RCA	
CA3018	RCA	1.62	CA3051	RCA	
CA3018A	RCA	2.22	MC815P	MOT	
CA3019	RCA	1.62	MC816P	MOT	
CA3020	RCA	2.56	MC817P	MOT	
CA3020A	RCA	3.26	MC818P	MOT	
CA3021	RCA	3.14	MC819P	MOT	
CA3022	RCA	2.64	MC822P	MOT	
CA3023	RCA	2.56	MC824P	MOT	
CA3026	RCA	2.06	MC825P	MOT	
CA3028A	RCA	1.47	MC826P	MOT	
CA3028B	RCA	2.06	MC879P	MOT	
CA3029	RCA	1.18	MC885P	MOT	
CA3029A	RCA	3.14	MC886P	MOT	
CA3030A	RCA	4.79	MC887P	MOT	
CA3031/702A	RCA	4.95	MC888P	MOT	
CA3032/702C	RCA	3.30	MC889P	MOT	
CA3033	RCA	4.79	MC890P	MOT	
CA3033A	RCA	8.09	MC892P	MOT	
CA3034V1	RCA	2.89	MC893P	MOT	
CA3035	RCA	2.48	MC898P	MOT	
CA3035V1	RCA	2.48	MC899P	MOT	

INTERNATIONAL RECTIFIER SILICON RECTIFIERS AND SELENIUM RECTIFIER STACKS

HOW TO ORDER

Specify Dept. No., 49 A 24, followed by Mfr's Type No. and Name.
Ex.: 49 A 24 E-075L-IR Designates International Rectifier E-075L.

COMPACT SELENIUM STACKS

Low cost, high density selenium rectifier for original equipment and replacement use. Offer long life, stable characteristics, negligible leakage. All are rated 130 volts rms max. input. With mounting bracket, hardware. Av. shpg. wt., 3 oz.

Type No.	Replaces Type	Size	DC Output (mA)	EACH
E-075L	TO65/075	2 1/32x.67x.67"	0-75	.44
E-150L	TO75/150	3/4x1x1"	75-150	.62
E-300L	T200/300	1 5/16x1 1/4x1 1/4"	150-300	.92
E-500L	T450/500	1 5/16x1 1/2x1 1/2"	400-500	1.02
E-650L	T550/650	2x2x2"	500-650	1.73

8D SUBMINIATURE SILICON RECTIFIERS

Silicon rectifiers using diffusion and encapsulation techniques to achieve DC output rating of 1000 mA at 25° C. Silver leads for easy soldering. Shpg. wt., 1 oz.

Mfr's Type	Peak Rev. V	Max. Surge, Amps	EACH
8 D4	400	50	.44
8 D6	600	50	.67

HOW TO ORDER RCA DIODES

Specify Dept. No., 49 A 1, followed by Mfr's Type No. and Name.
For example, 49 A 1 KD2501-RCA designates RCA type KD2501

"PLUG IN" ALL-CIRCUIT SILICON RECTIFIERS

Fit clip-type rectifier holders for use in radio-TV, m
control, amplifier, industrial power supply circ
PIV, 400V. Input rms, 140 V. Shpg. wt., 2 oz.

Type No.	Output, DCmA @ 50° C		Max. Surge Amps	EAC
	Resistive	Capacitive		
1MA4	350	250	2	.80
5MA4	1000	800	50	.92

57 A 3006. Holder. Shpg. wt., 2 oz. . . . .

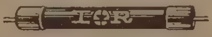
ZENER DIODE KIT

DD-170. This bargain package contains an assortment of 5 popul
1-watt zener diodes and a complete 24-page instruction manual th
includes many hobby and experimental projects. Shpg. wt., 3 oz.
DD-170 . . . . **1.9**

SILICON RECTIFIER KITS

Low priced rectifier kits designed to encourage experimentation w
and understanding of silicon rectifiers. Ideal for schools, laborato
commercial applications, experimental and hobby projects. Kits
tain a free 24 page instruction manual crammed with interesting
instructive projects and experiments. Shpg. wt., 3 oz.

DD-175. 100 PRV., 1/2 amp. . . . . **Pkg. of 4 for**
DD-176. 200 PRV., 1/2 amp. . . . . **Pkg. of 2 for**
DD-177. 400 PRV., 1/2 amp. . . . . **Pkg. of 2 for**



COLOR-TV RECTIFIER

Selenium cartridge rectifier used in 1964 color sets. Shpg. wt., 3 oz.

Mfr's Type	PRV (Volts)	Use	EAC
61-8969	6500	Focus	2.95

RCA DIODES (For use in TV, AM or AM/FM radio, and other Communication Devices)

ZENER DIODES

Mfr's Type	Material	Operating Voltage	Dissipation	Shpg. Wt.	EACH
KD2501	Silicon	10 V	400mW	1/2 oz.	1.50
KD2503	Silicon	6.2 V	1 W	1/2 oz.	1.80
KD2504	Silicon	9.1 V	1 W	1/2 oz.	1.80
KD2505	Silicon	12 V	1 W	1/2 oz.	1.80
....	....	....	....	....	......

CRYSTAL DIODES

Mfr's Type	Material	Cont. Reverse Voltage	Aver. Forward Current	Shpg. Wt.	EA
1N34A	Germanium	60 V	50 mA	1/2 oz.	
1N60	Germanium	25 V	50 mA	1/2 oz.	
1N82A	Silicon	5 V	......	1/2 oz.	
1N270	Germanium	80 V	90 mA	1/2 oz.	
1N295	Germanium	40 V	35 mA	1/2 oz.	

RCA "Top-of-the-Line" Solid-State Replacements

GERMANIUM TRANSISTORS

3. Germanium, PNP, alloy-junction transistor for replacement
utput, driver and low-level amplifier stages of battery-operated
radios and other electronic equipment using DC supply not
than 9 volts. Shpg. wt., 2 oz.
03 .... .99

4. Germanium, PNP, alloy-junction transistor for replacement
utput, driver and low-level amplifier stages in battery-operated
radios and other electronic equipment using DC supply not
than 15 volts. Shpg. wt., 2 oz.
04 .... 1.14

5. Germanium, PNP, alloy-junction transistor for replacement
F amplifier, converter and IF amplifier stages of standard AM
st band (530 to 1550 kHz) sets. Shpg. wt., 2 oz.
05 .... 1.17

6. Germanium, PNP, drift-field transistor for replacement use in
plifier, IF amplifier and converter stages of FM and AM/FM
s up to 108 MHz and other electronic equipment using DC supply
5 volts. Shpg. wt., 2 oz.
06 .... 1.41

7. Germanium, PNP, drift-field transistor for replacement use in
plifier, IF amplifier and converter stages of "all-wave" receivers
MHz using DC supply up to 15 volts. Shpg. wt., 2 oz.
07 .... 1.26

8. Germanium, PNP, drift-field transistor for RF amplifier, IF
r and converter stages of standard broadcast car radios and
radios up to 15 volts. Shpg. wt., 2 oz.
08 .... 1.23

9. Germanium, PNP, alloy-junction transistor for audio output
of auto radios, high-fidelity amplifier equipment, and communi-
equipment. Shpg. wt., 2 oz.
09 .... 2.34

0. Germanium, NPN, alloy-junction transistor for replacement
lass A voltage amplifier or driver stage using DC supply voltages
ater than 15 volts. Shpg. wt., 2 oz.
10 .... 1.26

1. Germanium, NPN, alloy-junction transistor for replacement
RF amplifier, converter, and IF amplifier stages of standard AM
ast band (530 to 1550 kHz) sets using supply voltages up to 18 V.
wt., 2 oz.
11 .... 1.62

2. Germanium, PNP, alloy-junction transistor for replacement
audio output stages of transistorized automobile radios. Stud-
d. Shpg. wt., 2 oz.
12 .... 4.38

3. Matched pair of SK-3009 transistors for replacement use in
ll type output stages of auto radios, high-fidelity amplifiers,
nmunications equipment. Shpg. wt., 4 oz.
13 .... 4.68

4. Germanium, PNP, drift-field transistor for audio output
of auto radios, high-fidelity amplifier equipment and other audio
nications equipment. Shpg. wt., 2 oz.
14 .... 3.15

5. Matched pair of SK-3014 transistors, above. For replacement
ush-pull audio output stages of auto radios, amplifiers and other
nications equipment. Shpg. wt., 4 oz.
15 .... 6.30

4. PNP, diffused. For replacement use in vertical output stages
rizontal driver stages of television receivers where set circuit
supply voltages up to 36 volts. Shpg. wt., 2 oz.
34 .... 4.50

5. PNP, diffused. For replacement use in horizontal output
of TV receivers using picture tubes with deflection angles up to
node voltage ratings to 10 kV. Shpg. wt., 2 oz.
35 .... 5.49

SILICON TRANSISTORS

8. Silicon, NPN, planar transistor for use in VHF-TV tuners,
amplifiers, FM tuners, FM-IF amplifiers, and other communica-
uipment. 4-terminal case. Shpg. wt., 4 oz.
18 .... 1.35

9. Silicon, NPN, planar transistor designed specifically for use
F TV oscillator stages that originally employed silicon NPN
ors. Sealed 4-terminal case. Shpg. wt., 4 oz.
19 .... 1.47

0. Silicon, NPN, planar transistor for AF amplifier output
or in low-level driver applications operating with collector
voltages up to 25 volts. Shpg. wt., 1 oz.
20 .... 1.32

1. Silicon, NPN, diffused transistor for replacement or ex-
nter use in AF output stages for line-operated radios, phono-
and color or black-and-white TV receivers using DC supply
s of 120 volts. Dissipation, up to 8 watts at $T_{MF}=70°C$. 2 oz.
21 .... 1.95

4. Silicon NPN diffused power transistor for replacement use in
stages of audio amplifiers using DC supply voltages to 80 V.
omplement of SK-3025. Shpg. wt., 2 oz.
24 .... 1.98

6. Silicon PNP planar power transistor for replacement use in
stages of audio amplifiers using DC supply voltages to 80 V.
omplement of SK-3024. Shpg. wt., 2 oz.
25 .... 2.70

6. Silicon NPN planar power transistor for use as replacement
or in Class A and B. Audio output amplifier stages in high
equipment, transmitters, etc. Shpg. wt., 2 oz.
26 .... 1.80

HOW TO ORDER

When ordering, specify Dept. No. 49 A 1, followed by Mfr's Type No. and Name. For Example:
49 A 1 SK3003-RCA Designates Radio Corp. of America Type SK3003

SILICON TRANSISTORS (Cont'd)

SK-3027. Silicon NPN planar power transistor for use as replacement transistor in class B push-pull audio output amplifier stages in high-fidelity and communications equipment. Shpg. wt., 2 oz.
SK-3027 .... 3.15

SK-3028. Matched pair of SK-3026 silicon NPN power transistors for replacement use in push-pull audio output amplifier stages in high-fidelity and communications equipment. Shpg. wt., 2 oz.
SK-3028 .... 3.60

SK-3029. Matched pair of SK-3027 silicon NPN power transistors for replacement use in push-pull audio output amplifier stages using supply voltages up to 80 V. Shpg. wt., 2 oz.
SK-3029 .... 6.30

SK-3036. NPN, diffused. For replacement use in Class B push-pull audio power amplifier stages of hi-fi and communications equipment with supply voltages up to 80 volts. Shpg. wt., 2 oz.
SK-3036 .... 5.85

SK-3037. Matched pair of SK-3036 transistors, above. NPN, diffused. For replacement use in Class B audio power amplifier stages in hi-fi and communications equipment delivering approximately 100 watt output. Shpg. wt., 4 oz.
SK-3037 .... 11.70

SK-3038. NPN, planar. For replacement use in small-signal, low-noise AF preamplifier stages of hi-fi and communications equipment using supply voltages up to 18 volts. Shpg. wt., 1 oz.
SK-3038 .... 1.44

SK-3039. NPN, planar. For replacement use in RF-amplifier, mixer, and converter stages of UHF-television receivers where sets circuit uses supply voltages up to 15 volts. Shpg. wt., 2 oz.
SK-3039 .... 1.98

SK-3040. NPN, diffused. For replacement use in video output stages of black and white television receivers where sets circuit uses supply voltages up to 140 volts. Shpg.wt., 2 oz.
SK-3040 .... 2.25

SK-3041. NPN, hometaxial-base. For replacement use in audio power output stages of automobile receivers using supply voltages up to 18 volts. Shpg. wt., 2 oz.
SK-3041 .... 2.52

SILICON RECTIFIERS

SK-3016. Silicon rectifier for color and black-and-white TV sets, hi-fi equipment, phonographs, etc. Hermetically sealed Top-Hat case. PRV, 500 V. DC Output, 1 A max. Shpg. wt., 2 oz.
SK-3016 .... .57

SK-3017A. Silicon rectifier for color and black-and-white TV sets, high-fidelity amplifiers, radios, phonographs, and other types of electronic equipment. Insulated case. PRV, 600 volts. DC output, 1 A max. Shpg. wt., 2 oz.
SK-3017A .... .60

SK-3030. Silicon rectifier for replacement use in high-fidelity equipment, color and black-and-white TV, other electronic devices. PRV of 200 volts; DC output current to 1 A. Insulated case. Shpg. wt., 2 oz.
SK-3030 .... .42

SK-3031. Silicon rectifier for replacement use in high-fidelity equipment, color or black-and-white TV, other electronic devices. PRV of 400 volts; DC output current to 1 A. Insulated case. Shpg. wt., 2 oz.
SK-3031 .... .51

SK-3032. Silicon rectifier for replacement use in high-fidelity equipment, color and black-and-white TV, other electronic devices. PRV of 800 volts; DC output current to 1 A. Insulated case. Shpg. wt., 2 oz.
SK-3032 .... .61

SK-3033. Silicon rectifier for replacement use in high-fidelity equipment, color and black-and-white TV, other electronic devices. PRV of 1000 volts; DC output current to 1 A. Shpg. wt., 2 oz.
SK-3033 .... .81

LINEAR INTEGRATED CIRCUITS

SK-3022. Wideband amplifier discriminator for replacement use only in audio IF stages of TV receivers. TO-5 style package with 10 leads. **To order, specify Department Number, 50 A 1, Mfr's Type No. and Name (50 A 1 SK3022-RCA).** Shpg. wt., 2 oz.
SK-3022 .... 3.96

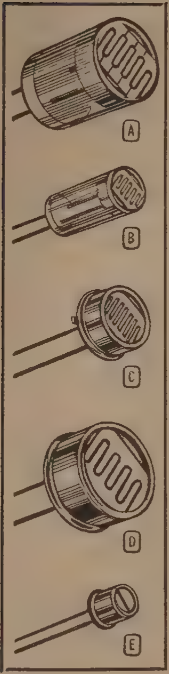
SK-3023. Wideband amplifier discriminator for replacement use only in audio IF stages of TV receivers. TO-5, 10-lead (Formed) pkg. **To order, specify Department Number, 50 A 1, Mfr's Type No. and Name. (50 A 1 SK3023-RCA).** Shpg. wt., 2 oz.
SK-3023 .... 3.96

SPG-202H CROSS REFERENCE GUIDE

Lists over 12,200 transistor, integrated circuit and rectifier types replaced by the SK-Series "Top-of-the-Line" semiconductors. Size, 8½x11". Shpg. wt., 1¼ lbs.
23 A 7232 E. .... .20

Photocells and Humidity-Sensitive Devices

CLAIREX CdS AND CdSe PHOTOCELLS



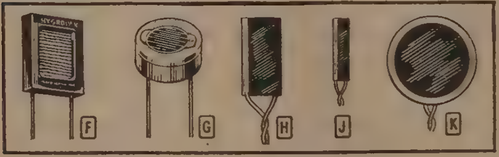
*Resistance @ 2 fc ± 33⅓%. †Res. ratio from 2 fc to dark within 5 seconds. ‡Power diss. @ 25°C. (mW). §With/with heat sink. Av. shpg. wt., 2 oz.

Stock No.	Type No.	Fig.	Description	DxL (In.)	*Resist. @ 2 fc	†Max. Res. Ratio	Max. Volt.	‡Power Dissip.	EA
60 A 9488	CL5M2	D	Type 2 CdS, peak resp. 5150 A., bluest response photosensitive material; high stability, low temp. error. Use with fluorescent and incandescent lamps.	.55x.18	55K	1:100	250	2000/500§	2.
60 A 7460	CL602	B		.25x.5	1 meg.	1:100	300	75	1.
60 A 7472	CL702	C		.36x.18	1 meg.	1:100	300	125	2.
60 A 7486	CL902	E		.21x.15	1 meg.	1:100	250	50	2.
60 A 7469	CL503	A	Type 3 CdSe, peak spectral response 7350 angstroms, fast response, and very high light-to-dark resistance ratio. Can be used for high speed switching or counting. Sensitive to near infra red. For use with incandescent or neon lamps.	.5x.5	7.2K	1:10,000	250	500/250§	1.
60 A 9489	CL5M3	D		.55x.18	7.2K	1:10,000	250	2000/500§	1.
60 A 7461	CL603	B		.25x.5	133K	1:10,000	300	75	1.
60 A 7462	CL603A	B		.25x.5	75K	1:10,000	300	75	1.
60 A 7463	CL603AL	B		.25x.5	3.5K	1:10,000	170	75	1.
60 A 7473	CL703	C		.36x.18	133K	1:10,000	300	125	1.
60 A 6437	CL703A	C		.36x.18	67K	1:10,000	300	125	1.
60 A 7474	CL703L	C		.36x.18	2.7K	1:10,000	100	125	1.
60 A 7488	CL903	E		.21x.15	133K	1:10,000	250	50	1.
60 A 6438	CL903A	E		.21x.15	67K	1:10,000	250	50	1.
60 A 6439	CL903L	E		.21x.15	5.9K	1:10,000	100	50	1.
60 A 7456	CL504	A	Type 4 CdSe, peak spectral response 6900 angstroms, very low resistance photocells. Can be used for "on-off" applications when low resistance is desired. For use with either incandescent or neon lamps.	.5x.5	1.5K	1:1000	250	500/250§	1.
60 A 9490	CL5M4	D		.55x.18	1.5K	1:1000	250	2000/500§	1.
60 A 7457	CL504L	A		.5x.5	0.25K	1:1000	170	500/250§	1.
60 A 6440	CL5M4L	D		.55x.18	0.25K	1:1000	170	2000/500§	1.
60 A 7464	CL604	B		.25x.5	30K	1:1000	300	75	1.
60 A 7465	CL604L	B		.25x.5	1.5K	1:1000	170	75	1.
60 A 6441	CL704	C		.36x.18	30K	1:1000	300	125	1.
60 A 7476	CL704L	C		.36x.18	0.6K	1:1000	100	125	1.
60 A 7490	CL904	E		.21x.15	30K	1:1000	250	50	1.
60 A 6442	CL904L	E		.21x.15	2K	1:1000	100	50	1.
60 A 7458	CL505	A	Type 5 CdS, peak spectral response 5500 angstroms (closely matches the human eye), stable, low memory photocell. Can be used in light measuring applications, and precision low speed switching. For use with incandescent, fluorescent or neon lamps.	.5x.5	9K	1:100	250	500/250§	1.
60 A 9491	CL5M5	D		.55x.18	9K	1:100	250	2000/500§	1.
60 A 7459	CL505L	A		.5x.5	1.5K	1:100	170	500/250§	1.
60 A 6443	CL5M5L	D		.55x.18	1.5K	1:100	170	2000/500§	1.
60 A 7466	CL605	B		.25x.5	166K	1:100	300	75	1.
60 A 7467	CL605L	B		.25x.5	1.5K	1:100	170	75	1.
60 A 6444	CL705	C		.36x.18	166K	1:100	300	125	2.
60 A 7478	CL705L	C		.36x.18	3.3K	1:100	100	125	1.
60 A 6445	CL905	E		.21x.15	166K	1:100	250	50	1.
60 A 6446	CL905L	E		.21x.15	10K	1:100	100	50	1.
60 A 6447	CL705HL	C	Type 5H CdS, peak response 5500A. Uniform color temp. response. For speed switching, hi-stability measuring; incandescent, fluorescent, neon lamps.	.36x.18	28K	1:1000	100	125	1.
60 A 6448	CL905HL	E		.21x.15	100K	1:1000	100	50	1.
60 A 6449	CL905HN	E		.21x.15	700K	1:1000	100	50	1.
60 A 6450	CL507	A	Type 7 CdS, peak spectral response 6150 angstroms, moderate speed and ratio. Can be used in general beam breaking applications. For use with incandescent, neon or fluorescent lamps.	.5x.5	7.2K	1:1000	250	500/250§	1.
60 A 9492	CL5M7	D		.55x.18	7.2K	1:1000	250	2000/500§	1.
60 A 7468	CL607	B		.25x.5	133K	1:1000	300	75	1.
60 A 6451	CL707	C		.36x.18	133K	1:1000	300	125	1.
60 A 6452	CL707L	C		.36x.18	2.7K	1:1000	100	125	1.
60 A 6453	CL907	E		.21x.15	133K	1:1000	250	50	1.
60 A 6454	CL907N	E		.21x.15	66K	1:1000	100	50	1.

DESIGNERS KIT
PHOTOCONDUCTIVE CELLS
BY
CLAIREX

CLAIREX PHOTOCELL KIT

Has five CdS and CdSe cells for a wide range of experiments. CdS types include: CL505, CL707, CL902; CdSe types: CL603A and CL704L. See above for descriptions. Shpg. wt. 5 oz.
60 A 9265 .... 10.00



F HYGROPAK HUMIDITY SENSORS

Quality sensors have 30% to 100% relative humidity range 1x1⅛x¼". ¾" pin spacing. Shpg. wt., 4 oz.

Stock No.	Type	Description	EACH
60 A 7746	HA	Under 100K to over 100 megs	5.00
60 A 7747	HA-26	30 ohms to 100 ohms	6.00
60 A 7748		Socket for HA or HA-26	.30

G POLARIS MAJ-1 PHOTOCELL

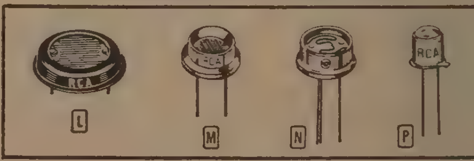
Type LDR-C1. Cds cell. 75-300 ohms at 92 fc; 10 megs in darkness. Max. change, 0.2 meg per sec. Max. dissipation, 0.2 W at 40°C. Max. cell voltage, 110 VAC (peak) or DC. Ambient range, −20° to +60°C.
60 A 7565. Shpg. wt., 6 oz. 1.00

SOLAR SYSTEM SILICON CELLS

Power transistor radios or operate relays and small motors from sunlight. Response, 20 μsec maximum. Peak sensitivity at 0.85 micron. Unmounted. 6" color-coded leads. Av. shpg. wt., 2 oz.

Stock No.	SS Type	Fig.	Output		Size	EACH
			mA	mW		
60 A 7566	10 4LC	H	18.0	7.2	.8x4"	1.95
60 A 7567	10 6LC	H	27.0	10.8	.8x.4"	2.40
60 A 7568	10 8LC	H	36.0	14.4	.8x.4"	3.60
60 A 7569	11 LC	H	12.0	4.8	.4x.4"	1.95
60 A 7570	12 LC	H	5.0	2.0	.4x.2"	1.50
60 A 7571	20 LC	J	12.0	4.8	.8x.2"	3.50
60 A 7572	21 LC	J	5.0	2.0	.4x.2"	2.20
60 A 7573	22 LC	J	2.5	1.0	.2x.2"	1.40
60 A 7574	23 LC	J	1.3	0.52	.2x.1"	1.00
60 A 7575	30 LC	K	75.0	30	1.125" d.	6.75

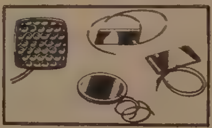
RCA BROAD-AREA CADMIUM-SULFIDE TYPE PHOTOCELLS



Top-quality cadmium-sulfide type photocells designed to meet toda rigid standards of performance, dependability and longevity. Maxim spectral response, 5100 angstroms. Hermetically sealed. All are gl metal types (GM in table). †Maximum DC or peak AC voltage. ‡Po dissipation in continuous service. Will do every job required of a c mium-sulfide photocell with excellent performance and efficien Modified cases: §TO-5, *TO-8, ♯TO-18. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Fig.	Dia. (Inches)	Make	† V	‡ W	Res. (Ohms) @ 2 fc	EAC	
								1-99	1
60 A 8275	SQ2503	L	1	GM	500	0.75	17	1.21	
60 A 8276	SQ2508	N	¼§	GM	200	0.05	60	1.24	
60 A 8277	SQ2519	N	¼§	GM	300	0.05	9	1.16	
60 A 8278	SQ2520	M	½*	GM	110	0.2	0.7	1.32	
60 A 8279	SQ2521	M	½*	GM	250	0.2	8	1.40	1
60 A 8281	SQ2526	M	½*	GM	110	0.2	3	1.32	
60 A 8282	SQ2527	M	½*	GM	110	0.2	1.6	1.32	
60 A 8284	SQ2529	N	¼§	GM	300	0.05	800	1.24	
60 A 8285	SQ2534	N	¼§	GM	150	0.03	6750	1.24	
60 A 8286	SQ2535	P	1/5♯	GM	50	0.02	25	1.57	1
60 A 8287	SQ2536	N	¼§	GM	110	0.05	3	1.24	

IR SOLAR CELL AND PHOTOCELL EXPERIMENTER KIT
HAS 7 CELLS FOR A VARIETY OF PROJECTS



Type K-421. Contains 7 different lenium, silicon and cadmium-sul photocells similar to illustrations left. May be used to power transi radios, build light meters, oper small motors from sunlight, etc. detailed instruction manual with wide variety of circuit diagrams experiments, plus "Experimen Handbook." Shpg. wt., 1 lb.
60 A 7875 5

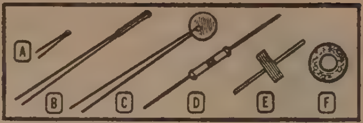
Thermistors and Semiconductor Coolers

THERMISTORS By FENWAL ELECTRONICS, INC.

	Mfr's Type	Fig.	Style	Ohms @ 25°C	Res. Ratio 0°C: 50°C	EACH
21	GD25J1	A	Bead	500	5.1:1	3.24
22	GB31J1	A	Bead	1000	7.3:1	2.70
11	GB32J2	A	Bead	2000	7.3:1	1.96
23	GB35J1	A	Bead	5000	7.3:1	3.24
24	GB41J1	A	Bead	10K	7.5:1	3.24
25	GA45J1	A	Bead	50K	10.3:1	2.67
09	GA51J1	A	Bead	100K	10.3:1	1.96
13	GA52J2	A	Bead	200K	10.9:1	2.70
26	GA55J1	A	Bead	500K	11.8:1	3.24
14	GA61J1	A	Bead	1000K	14.0:1	3.78
27	GB31P2	B	Probe	1000	7.3:1	2.00
28	GB32P2	B	Probe	2000	7.3:1	2.00
12	GB32P8	B	Probe	2000	7.3:1	2.35
29	GB34P2	B	Probe	4000	7.3:1	2.00
30	GB41P2	B	Probe	10K	7.5:1	2.40
31	GB42P2	B	Probe	20K	7.5:1	2.40
16	GA45P2	B	Probe	50K	10.3:1	2.20
10	GA51P2	B	Probe	100K	10.3:1	2.00
67	GA51P8	B	Probe	100K	10.3:1	2.35
32	GA52P2	B	Probe	200K	10.9:1	2.00
33	GA55P2	B	Probe	500K	11.8:1	2.40
34	GA61P2	B	Probe	1.0 Meg	14.0:1	2.80
35	JB25J1	C	Disc	500	6.9:1	1.00
36	JB31J1	C	Disc	1000	6.9:1	1.00
37	JA33J1	C	Disc	3000	9.1:1	1.00
75	JA35J1	C	Disc	5000	9.1:1	1.00
18	JA38J1	C	Disc	8000	9.1:1	1.00
38	JA41J1	C	Disc	10K	9.1:1	1.00
39	KB21J1	C	Disc	100	6.9:1	.85
40	KB22J1	C	Disc	200	6.9:1	.85
41	KB23J1	C	Disc	300	6.9:1	.85
42	KB25J1	C	Disc	500	6.9:1	.85
14	KA31L1	E	Disc	1000	9.1:1	.85
19	KA33J1	C	Disc	3000	9.1:1	.85
43	KA35J3	C	Disc	5000	9.1:1	.85
44	LB12J2	C	Disc	18.6	6.9:1	.97

In a Wide Variety of Styles

For All Job Requirements



Use glass-coated bead thermistors where fast response, precision and operation in temperatures up to 600°F are required. Medium-small glass probes are similar, but are more rugged and mount more easily. Discs are used for medium power and time response, for temperatures up to 125°C. Rods and washers are ideal for high dissipation applications; operate in temperatures up to 150°C. Av. shpg. wt., 2 oz.

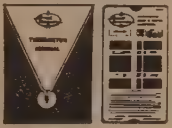
Stock No.	Mfr's Type	Fig.	Style	Ohms @ 25°C	Res. Ratio 0°C: 50°C	EACH
60 A 7120	LB15J1	C	Disc	50	6.9:1	.85
60 A 9915	LB21J1	C	Disc	100	6.9:1	.85
60 A 8646	LA25L2	E	Disc	500	9.1:1	.85
60 A 8647	LA31J1	C	Disc	1000	9.1:1	.85
60 A 8648	MB13J1	C	Disc	25	6.9:1	.85
60 A 8649	MA21J1	C	Disc	100	9.1:1	.85
60 A 8650	NB11J1	C	Disc	10	6.9:1	.85
60 A 8651	NA21J1	C	Disc	100	9.1:1	.85
60 A 8652	NA22J1	C	Disc	250	9.1:1	.85
60 A 8653	QB41J1	D	Rod	10K	7.1:1	1.25
60 A 9916	QA51J1	D	Rod	100K	9.1:1	1.25
60 A 9917	RB33L1	D	Rod	3150	7.1:1	1.20
60 A 9918	RB41L1	D	Rod	10K	9.1:1	1.20
60 A 9878	RA43L1	D	Rod	31.5K	9.1:1	1.20
60 A 8654	RA51L1	D	Rod	100K	9.1:1	1.35
60 A 8655	TB31L1	D	Rod	1K	7.1:1	1.35
60 A 8656	TA45L1	D	Rod	50K	9.1:1	1.60
60 A 9925	WB11W1	F	Washer	10	6.9:1	1.25
60 A 9919	WA21W1	F	Washer	100	9.1:1	1.25

RIMENTER'S THERMISTOR KITS

G-700 Low-Cost Kit. 4 glass beads and probes, manual and computer for many uses. 1 lb.
60 A 8658 4.95

G-701 Economy Kit. 10 glass beads and probes, manual and computer for more uses. Shpg wt., 1 lb.
60 A 8659.......9.95

THERMISTOR ENGINEERING PACKAGE



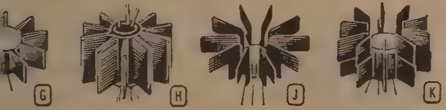
Includes 5x8" resistance-temperature slide rule and thermistor manual giving the specifications of over 500 thermistors. Use as step-by-step primer and guide when designing circuits. Wt., 4 oz.
60 A 9877...1.00

THERMISTOR PROBE

Thermistor mounted on card, with detailed instructions and schematics showing procedures for use as a remote temperature indicator, liquid level control, or time-delay relay. Rated 135K ohms at 25°C; 1 mW/°C dissipation constant over a time period of 25 seconds. Still-air time constant, 0.3 seconds in rapidly stirred water. Shpg. wt., 2 oz.
60 A 6615..........................1.00

WAKEFIELD ENGINEERING SEMICONDUCTOR COOLERS

SERIES 200 FEATHERWEIGHT COOLERS



fin design permits horizontal *or* vertical orientation with excellent convection. In forced convection uses, the axis of the semitor may be oriented either perpendicular or parallel to the direcair flow. Series 200 coolers are made from a beryllium copper aving twice the thermal conductivity of commonly used alloys. inish. **Meets MIL-C-81021.** Shpg. wt., 2 oz.

ock o.	Mfr's Type	Fig.	Dia. In.	Lght. In.	Fits Case Dia.	EACH
6527	NF201	G	.64	.19	.161/.24	.27
6528	NF203	K	.64	.38	.161/.24	.29
9525	NF204	G	.55	.20	.275/.370	.25
6529	NF205	G	.72	.19	.275/.370	.27
6530	NF207	K	.72	.38	.275/.370	.29
6531	NF209	J	1.28	.44	.275 .370	.34
7074	NF211	G	.83	.19	.440 544	.27
7073	NF213	K	.83	.38	.440 .544	.29
7075	NF215	J	1.40	.44	.440 .544	.34
7042	NF222	H	.64	.38	.165/.240	.38
7043	NF224	H	.72	.44	.275/.371	.38

INSTALLATION TOOLS FOR MODELS ABOVE

532	160 Installation tool for Models 201, 3, 5, 7, 9	1.50
921	161 Installation tool for Models 211, 13, 15	1.50

TYPE 120 THERMAL JOINT COMPOUND

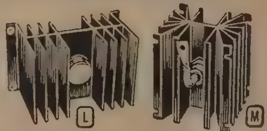
THERMAL COMPOUND
WAKEFIELD

-like material providing high thermal resistance. Rethe high thermal impedance of an air gap present bethe mating surfaces of the semiconductor case and then the heat sink surface. Provides better dissipation capahelps keep semiconductor from overheating. Av. shpg. oz.

tock No.	Type No.	Quantity	EACH
0 A 9506	122	2 oz.	1.95
0 A 9507	128	8 oz.	5.10
A 9514	1280	5 lbs.	30.00

SERIES 400 NATURAL CONVECTION COOLERS

Ideal for use where space is critical. Features an optimum fin design for reliability in a wide range of semiconductor applications. Mounting area: Types 401-403, 6.3 sq. in.; Type 441, 7.13 sq. in. Black anodize finish per **MIL-A-8625** Type II specifications. Av. shpg. wt., 4 oz.



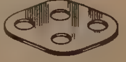
Stock No.	Mfr's Type	Fig.	Inches			EACH
			H	W	D	
60 A 6501	NC401A	L	1.50	4.81	1.25	1.55
60 A 6502	NC401B	L	1 50	4.81	1.25	1.55
60 A 7094	NC401E	L	1.50	4.81	1.25	1.78
60 A 6503	NC401K	L	1.50	4.81	1.25	1.29
60 A 6504	NC403A	L	3.00	4.81	1.25	1.78
60 A 6505	NC403B	L	3.00	4.81	1.25	1.78
60 A 7096	NC403C	L	3.00	4.81	1.25	1.78
60 A 6506	NC403K	L	3.00	4.81	1.25	1.52
60 A 9526	NC413A	L	3.00	4.81	1.87	2.41
60 A 9527	NC413B	L	3.00	4.81	1.87	2.41
60 A 9528	NC413K	L	3.00	4.81	1.87	2.15
60 A 6507	NC421A	L	3.00	4.81	2.63	2.51
60 A 6508	NC421B	L	3.00	4.81	2.63	2.51
60 A 7098	NC421C	L	3.00	4.81	2.63	2.51
60 A 6509	NC421K	L	3.00	4.81	2.63	2.24
60 A 6510	NC423A	L	5.50	4.81	2.63	3.66
60 A 6511	NC423B	L	5.50	4.81	2.63	3.66
60 A 6512	NC423K	L	5.50	4.81	2.63	3.40
60 A 7106	NC441J	M	5.50	4.75	4.50	6.41
60 A 7107	NC441W	M	5.50	4.75	4.50	6.41
60 A 6533	NC441K	M	5.50	4.75	4.50	5.92

TYPE 153 DELTA CAST

DELTA CAST
WAKEFIELD

A pourable casting for encapsulating components and assemblies. Equalizes assembly temperature by removing heat from components. Has thermal expansion similar to aluminum or copper. **In 8-oz. Jar.** Shpg. wt., 8 oz.
60 A 9494 ....4.00

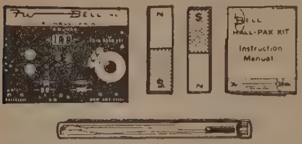
TYPE 170 ALUMINUM INSULATING WAFER



For use with TO-3 transistors. Has thermally conductive dielectric coating providing a direct thermal path between the case and the heat sink. Wt., 2 oz.
60 A 9495..............................Each .12

Electronic Specialty Items

F. W. BELL "HALL PAK" EXPERIMENTAL KIT



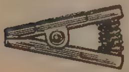
Demonstrates Hall effect—development of a voltage between two edges of a strip of metal in which electric current is flowing longitudinally. Ideal for class instruction. Has: Hall-effect device; circuit board (balancing network, transistor DC amplifier), magnet; and complete instructions.
60 A 7659. Shpg. wt., 4 lbs. 21.95

CINCH-JONES POWER TRANSISTOR HEAT SINKS

Anodized aluminum wafers to meet exacting applications. High thermal conductivity reduces operating temperature of transistor. High corrosion resistance. Type 2W-1 is for Motorola 2N176, 2N179, 2N554; Type 2W-2 (not illus.) is for Delco 2N174. 2 oz.

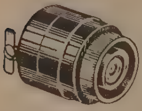
Stock No.	Type	1-24, EA.	25-49, EA.	50-99, EA.	100-249, EA.
60 A 6039	2W-1	.54	.43	.36	.29
60 A 6040	2W-2	.42	.34	.28	.22

AVTRON HEAT-SINK CLIP



Easy way to protect semiconductors from heat while soldering. Springloaded, aluminum clip fits around wire between semiconductor and joint. Shpg. wt., 2 oz.
60 A 8819. 1-99. . Each .25   100-up. . . . Each .20

MALLORY SONALERT AUDIBLE WARNING DEVICE



Solid state miniature audible-signal warning device emits a discernible signal at minimum current. Eliminates possibility of arcing or RF as in other types of devices. For communications control systems; other electronic equipment. *Pulsing sound output. 8 oz.

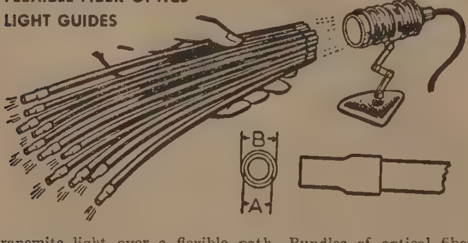
Stock No.	Mfr's Type	EACH	Stock No.	Mfr's Type	EACH
60 A 8983	SC628	5.50	60 A 8985	SC628A	8.75
60 A 9745	SC628P*	9.95	60 A 8986	SC110	8.75
60 A 8984	SC628H	6.35			

SPECIFICATIONS

Type	Freq.	Volts	mA	dB	Temp. F°
SC628	2.5 kHz	6-28DC	3-14	68-80	—40-130
SC628P*	2.5 kHz	6-28DC	3-14	65-77	—40-130
SC628H	4.5 kHz	6-28DC	3-14	68-80	—40-130
SC628A	2.5 kHz	6-28AC/DC	3-14	68-80	—40-130
SC110	2.5 kHz	110AC/DC	14	80	—40-130

AMERICAN OPTICAL FIBER OPTICS

FLEXIBLE FIBER-OPTICS LIGHT GUIDES



Transmits light over a flexible path. Bundles of optical fibers cemented and polished at each end. Guides have stainless steel end tips; encased in PVC sheath. Transmit light through visible and near infrared spectrum to a wave-length about 1.5 microns. 2 oz.

Stock No.	Mfr's Type	Min. Rad. of Bend	Bundle Dia.	A ±.003	B ±.004	Lgth.	EACH
60 A 8989	LGM-1	3/8"	.020"	.032"	.032"	12"	4.80
69 A 9780	LGM-1	3/8"	.020"	.032"	.032"	24"	6.40
60 A 8990	LGM-2	5/8"	.062"	.110"	.160"	12"	13.00
60 A 9781	LGM-2	5/8"	.062"	.110"	.160"	24"	14.00
60 A 8991	LGM-2	5/8"	.062"	.110"	.160"	36"	15.00

G. E. SILICONES AND COMPOUNDS

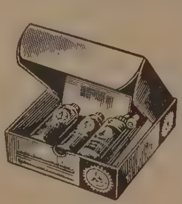
SILICONE RUBBER SEALANTS

- Withstand temperature extremes without cracking
- Contain no solvents—cure with minimum of shrinkage

Ready-to-use silicone rubber adhesive/sealants for many appl tions. In squeeze tubes, they are easily applied and air cure to f a durable silicone rubber. Needs no catalyst. Applied at ro temperature, adheres without priming. Excellent electrical pro ties. Withstand —75°F to +300°F. Resist moisture, weathe and aging. Cure with a minimum of shrinkage.

Type RTV-	Description	3-oz. Tube Stock No.	EA.	12-oz. Tube Stock No.	
102	White. For shock mounting	60 A 7227	1.75	60 A 7228	5
103	Black. For rubber repair	60 A 7229	1.75	60 A 7230	5
108	Translucent	60 A 8594	1.75	60 A 8595	5
106	Red. For temp. to+600° F.	60 A 8916	2.20	60 A 8918	7
112	White. Brushing or spraying	60 A 7235	2.20	60 A 7236	7

FLUOROCARBON TEFLON® BONDING KIT



Contains all materials needed to b "non-bondable" Teflon to itself and o substances. Kit contains a bottle of Te treating agent and two tubes of Ther Blend Epoxy Cement. Treating agen applied to Teflon surface until it tu permanently brown, then surface cleaned. Bonding agent is then appl and parts are fitted together. Cure about four hours at 300°F. Kit inclu complete instruction brochure, Te treating agent, two tubes epoxy cem Wt., 2 lbs.
60 A 7037. Bonding Kit No. 1 . . . Ea. 1

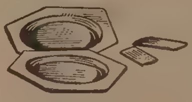
PLASTIC ASSOCIATES

READY-TO-USE EPOXY CEMENTS

PA-1101 THERMA-BLEND EPOXY PASTE

Thoroughly factory-mixed and ready-to-use epoxy ment in paste form. Saves much valuable product time on assembly lines when used for cementing, seal insulating and protecting. Works on practically any t of porous and non-porous material. Needs no mixin only catalyst necessary is the application of 400°F h from an ordinary heat lamp, oven or an open fla Curing time is 6 minutes at 400°F; at 360°F, cu time increases to 40 minutes. Once Therma-Bl epoxy cement paste is cured, it forms a perfect permanent bond. Maintains great sheer strength, e at high temperature extremes. Meets MIL-A-8623 sp fications. Supplied in convenient 1½-oz. squeeze t Shpg. wt., 2 oz.
60 A 7680. 1½-oz. Tube. .Each 2

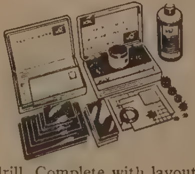
PA-1000 AND PA-1001 ROOM-TEMPERATURE AIR-CURE EPOXY KITS



Pre-measured two-component mi package to prepare air-curing, short life epoxy cement without waste. C lyst and resin are vacuum-sealed in p ethylene container. Includes sti stick. Adheres to most porous or non-porous materials. Cures f —50°F to +250°F. Cured bond has tensile strength of 1900 Shpg. wt. per pkg., 8 oz.

Stock No.	Mfr's Type	No. of Units	Oz. per Unit	EAC
60 A 7690	PA-1000	10	1/10	2.50
60 A 7691	PA-1001	10	1/5	4.00

TECHNIQUES 5002 EXPERIMENTERS KIT



Excellent beginners kit for lea the technique of etched circuitry. includes single and double sided per laminated for making ultra- pact miniature transmitters, recei radio control units and other pro of your design. Kit contains: six per clad boards from 4½x3" to 2¼"; three printed circuit tube s ets; tape resist; resist circles; et solution; printed circuit eyelets drill. Complete with layout and instructions. All parts package convenient plastic box, 5½x1¾x4".
47 A 1250. Shpg. wt., 8 oz.. 4

Rotron Cooling Fans

COMPACT SPRITE® FAN—33-CFM

Small, Only 3⅛″ Square x 1⅝″ Deep
½″ Panel Height in Relay Racks
ient Temp. Range, —20° to +140° F

t for any application requiring 33-cfm lelivery). Unusually small size makes l where space is at a premium. Fits panel height in relay racks. Applica- nclude: power supplies, transmitters eceivers, digital voltmeters, office g machines, paper-tape equipment, ers, printers, etc. Easily mounted with n fan-barrel flanges. Quiet—only 35 dB noise level. Venturi, s, and motor mounting are combined in a single aluminum sting. Has 9-blade molded propeller made of high-impact rbonate. Airflow is easily reversed by turning fan end-for-end. p to 5 years. Order accessories below. For 115 volts, 50-60 . Shpg. wt., 14 oz.

764. Model SP2A2	Each	13.20
765. Finger Guard for Above. Wt. 8 oz.	Each	.60
766. Plug and Cord for Above. Wt., 5 oz.	Each	.90
618. Oiler Kit for Above. Wt., 6 oz.	Each	3.00
617. Lubricant for Above. Wt., 3 oz.	Each	1.75

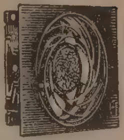
LOW-COST SKIPPER® FAN—100-CFM

es really economical cooling. Ideal for ters, vending machines, and general nic equipment. Delivers 100 cfm (free y) at ambient temperatures up to 140° y 5³⁄₁₆″ diameter by 1¹³⁄₁₆″ deep. Bear- at sink helps keep motor cool. Quiet— 3 dB noise level. Airflow reversible. No ing holes required—mounts with just ning ring. Rugged polypropylene ven- luminum motor and spiders. Life in of 5 years. For 115 volts, 50-60 Hz AC. wt., 15 oz.

766. SKP-2 Skeleton Fan, Less Venturi	Each	7.80
715. SKR-2 Venturi Fan with Frame	Each	8.30

LONG-LIFE GOLD SEAL MUFFIN® FAN—100-CFM

- Extremely Thin, 4¹¹⁄₁₆″ Square x 1½″ Deep
- Quiet, Highly Efficient Air Mover
- Advanced Bearing System Gives Longer Life



Cools, directs heat, or ventilates at moderate cost. Excellent for computers, office machinery, electronic equipment, and other applications. Noise level reduced to only 40 dB at free air delivery for quiet operation. Airflow is reversible by turning fan end-for-end.

Ambient temperature range: 0° to 160° F. Life expectancy 5 years at 70° F. Filter Fan has 14x18 mesh aluminum air filter. For 115 volts, 50-60 Hz AC. Shpg. wt., 1 lb.

60 A 8599. Skeleton Fan	Each	11.90
60 A 8597. Venturi Fan with Frame. 15 oz.	Each	12.25
60 A 8596. Grille Fan with Frame, Grille. 1¼ lbs.	Each	13.25
60 A 8598. Filter Fan with Frame, Grille, Filter. 1¼ lbs.	Each	15.00

SUPER-QUIET WHISPER® FAN—65-CFM

Silent operation makes the Whisper Fan the ultimate when noise must be minimized. Low 18 decibel noise level makes it ideal for offices, laboratories, sound systems, and other noise-sensitive devices. Reversible airflow. Compact —only 4¹¹⁄₁₆″ square by 1½″ deep. High-impact, flame retardant, black phenolic frame. Encapsulated bus-bar leads with solder terminals provide maximum resistance to humidity. Advanced bearing system and relative slow speed (1800 rpm nominal) assure long life. Draws only 7 watts power. U.L. Listed. For 115 volts, 50-60 Hz AC. Shpg. wt., 1 lb.

60 A 9400. Skeleton Fan	Each	13.80
60 A 8611. Venturi Fan with Frame. 1 lb.	Each	14.15
60 A 8610. Grille Fan with Frame, Grille. 1¼ lbs.	Each	15.15
60 A 8612. Filter Fan with Frame, Grille, Filter. 1¼ lbs.	Each	16.90
16 A 2031. Delwyn "Whisper" Fan Kit, Cord, Plug. 2 oz.	Each	14.85

ACCESSORIES FOR MUFFIN AND WHISPER FANS

613. Type A15449 Filter Fan Conversion Kit. Includes filter, and clips. Shpg. wt. ¼ lb.	Each	2.75
614. Type 16238 Standard Spiral Grille. 3 oz.	Each	.80
401. Type 17826 Expanded Metal Grille. 3 oz.	Each	.80
615. Type 13996 Mounting Clips. 2 oz.	Per Pair	.20
268. Type 20132-2 Finger Guard. 2 oz.	Each	.50
60 A 8616. Type 16415 Plug and Cord Assembly. 2 oz.	Each	.60
60 A 8619. Type A15448 Filter Cart. for Muffin Fan. 2 oz.	Each	2.00
60 A 7071. Type 18440 Filtercoat for Above Cart. 3 oz.	Per Can	1.00
60 A 7072. Type 13967 Filter Frame. 2 oz.	Each	.80
60 A 8618. Type 19263 Oiler Kit. 6 oz.	Each	3.00
60 A 8617. Type 19263-4 Lubricant for Oiler Kit. 3 oz.	Each	1.75

TARZAN® FAN—350-CFM

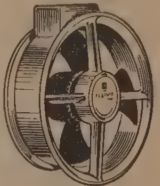
Designed for Solid-State Components
rovides Reversible Air Flow

axial fan designed for cooling tightly- electronic cabinets. Radical departure design provides centrifugal-blower per- ice in an axial-flow fan. Ideal for solid- omponents, densely-packed relay-rack inications equipment, compact air-to- heat exchangers, and other uses. Air- reversible. Ambient temperatures to . Life to 3 years at 120° F. Phenolic l; diecast aluminum spiders; polycar- 5-blade propeller; double-shielded ball gs, lubricated for life. Ventilated im- hub insures positive cooling of motor. Mounts easily with venturi. Only 6²⁹⁄₃₂″ square by 4¹¹⁄₃₂″ deep. For 115 volts, 50- AC. Shpg. wt., 5 lbs.

717. Type TN3B2 Tarzan Fan with Solder Terminals	Each	42.45
718. Type TN3D2 Tarzan Fan with 12″ Leads	Each	41.80
719. Type 21196-2 Guard. Protects fan blades. Use for either outlet. 4 oz.	Each	1.50
374. Type 20990 Filter Box. 1 lb.	Each	9.35
300. Type 17555 Plug and Cord Set. For Model TN3B2 Tarzan ith terminal connections. 2 oz.	Each	.60
071 Type 18440. Filtercoat. 3 oz.	Per Can	1.00

LIGHT FEATHER® FAN—270-CFM

- Stainless Steel Bearings
- Draws Only 22 Watts

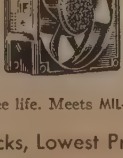


TYPE 103. Moves large volume of air in limited spaces requiring a shallow fan. Excellent for computer consoles, relay racks, power supplies, heat exchangers, and other devices. Ambient temperature range: —55° to +65° C. Prelubricated miniature stainless-steel ball bearings. Full 270 cfm (free delivery). Clamping rim mounting provides reversible airflow. Tinned brass terminals. High-impact, fungus-proof, two-tone gray Lexan plastic. Only 7″ dia. by 2⁷⁄₁₆″ deep. Draws 22 watts. Interchangeable with Saucer Fan. For 115 volts, 50-60 Hz AC. U.L. Listed. Shpg. wt., 1½ lbs.

60 A 8593. Type 103 Feather Fan	Each	34.00
60 A 7246. Type 124110 Filter Box. 1 lb.	Each	10.15
60 A 8591. Type 14559 Rim-Mount Guard. For rim-mounting. Shpg. wt., 4 oz.	Each	3.65
60 A 8592. Type 14651 Panel-Mount Guard. For panel mounting Type 103 Fan. (Use with Clips below.) 4 oz.	Each	3.65
60 A 7247. Type 16410 Mounting Clamps. Uses 3. 2 oz.	Each	.05
60 A 7070. Type 14611 Panel-Mount Clip. Uses 3 with each panel-mount guard above. 1 oz.	Each	.15
60 A 9393. Type 16398 Plug and Cord. 2 oz.	Each	.80
60 A 7071. Type 18440 Filtercoat. 3 oz.	Per Can	1.00

LIGHTWEIGHT SENTINEL® FAN—100-CFM

ry Thin, 4¹¹⁄₁₆″ Square x 1½″ Deep
elubricated Bearings, No Maintenance
mbient Temperature Range to 100° C

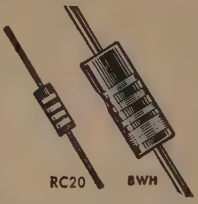


eight fan with heavyweight stamina wer. For those ultra-rugged applica- here heat and the avoidance of lubri- are major factors. Weighs only 1 pound asures only 4¹¹⁄₁₆″ square by 1½″ deep, vers 100 cfm at ambient temperatures C. Provides real powerhouse per- ce and an exceptionally long, trouble-free life. Meets MIL-E-4970A. Engineered with every possible feature that allows cool operation at high ambient temperatures. Aluminum heat sink keeps motor cool. Venturi is of high-impact, glass-filled phenolic. Stator is completely encapsulated. Lifetime-lubricated stainless-steel ball bearings. Skeleton, Venturi, Grille, and Filter Fans listed below. For 115 volts, 50-60 Hz AC. U.L. Listed. Shpg. wt., 1 lb.

60 A 8804. Skeleton Fan. Includes fan, motor	Each	21.85
60 A 8803. Venturi Fan. Glass-filled phenolic venturi	Each	22.75
60 A 8802. Grille Fan. With venturi and grille	Each	23.75
60 A 8801. Filter Fan. Shipped complete with venturi, grille and filter	Each	25.25

IRC Carbon and Wirewound Insulated Resistors

MIL R 11
STYLE RC07
220 K
10%
¼ WATT
CARBON COMPOSITION RESISTOR
IRC
10 UNITS
SNAP PAK
Original Equipment Part



HANDY "SNAP PAK"

Resistors can be tested while in package. Added protection, faster identification, 10 resistors per pkg. in ¼ and ½-watt sizes, 5 per pkg. in larger sizes.

CARBON COMPOSITION AND WIREWOUND RESIST

Type RC Fixed Composition Resistors. Choose from 10% (see Table A) o (Table B) tolerances. Engineered to meet or exceed MIL-R-11 specifications. stand 50 to 100% overloads for short periods of time. EIA (RETMA) co easy identification. Have well-anchored, positive-contact leads with no hot Sizes: RC-¼, ¼x3/32"; RC-½, 25/64x9/64"; RC-1, 9/16x7/32"; RC-2, 11/16x5/16". Shp per 100: ¼W, 4 oz.; ½W, 6 oz.; 1W, 10 oz.; 2W, 14 oz.

Type BWH-2-Watt Fixed Wirewound. Available in values up to 1800 Ohms. C from 10% (Table A) or 5% (Table B) tolerances. Rated at 2-watts up to ambient temperature; 1-watt at 239°F; and ½-watt at 279°F. Manufactur meet MIL-R-11D specifications. EIA (RETMA) coded for easy identifica wide first band. Inductance .04-4.5 μH from .24-1800 ohms respectively. Sam as 1-watt composition resistors listed above. Shpg. wt. per 100, 10 oz.

EXPLANATION OF MIL NUMBERS

MIL Numbers. Example: RC07GF-153K. RC designates composition type res 07, ¼-watt rating. GF, characteristic—ambient temperature. (G) and resis temperature (F) in reference to MIL-R-11D specification, 153, indicates no resistance in ohms—first 2 digits are significant figures, 3rd digit is numb zeros to add. Tolerance—J, ±5%; K, ±10%; M, ±20%.

10% INSULATED RC AND BWH TYPES

TYPE RC 10% FIXED COMPOSITION—SPECIFY VALUES WANTED

Stock No.	Mfr's Type		MIL Equivalent	Watts	Values See Table "A"	EACH	May Be Assorted (Order Each Value in Multiples of 10) EACH				
	New	Old				1-9	10-99	100-499	500-999	1000-2499	2500-4999
45 A 7150 C	RC-¼	GBT-¼	RC07GF	¼	2.7Ω to 1 meg	.09	.07	.06	.05	.04	.03
45 A 5000 C	RC-½	GBT-½	RC20GF	½	2.7Ω to 22 meg	.09	.07	.06	.05	.04	.03
45 A 5020 C	RC-1	GBT-1	RC32GF	1	10Ω to 22 meg	.18	.08	.07	.06	.05	.04
45 A 5070 C	RC-2	SR-2	RC42GF	2	10Ω to 22 meg	.22	.15	.13	.11	.10	.09

TYPE BWH 10% 2-WATT FIXED WIREWOUND—SPECIFY VALUES WANTED—TO 1500 OHMS ONLY

Stock No.	Mfr's Type	MIL Equivalent	Watts	Values See Table "A"	EACH	May Be Assorted (Order Each Value in Multiples of 5) EACH				
					1-4	5-99	100-499	500-999	1000-2499	2500-4999
45 A 5076 C	BWH	....	2	.10Ω to 8.2Ω	.18	.11	.10	.09	.08	.07
45 A 5077 C	BWH	....	2	10Ω to 1500Ω	.18	.11	.10	.09	.08	.07

TABLE "A"—10% EIA (RETMA) VALUES—SPECIFY RESISTANCE WANTED

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Megs	Megs	Megs
0.10	0.33	1.0	3.3	10	33	100	330	1000	3300	10K	33K	100K	330K	1.0	3.3	10
0.12	0.39	1.2	3.9	12	39	120	390	1200	3900	12K	39K	120K	390K	1.2	3.9	12
0.15	0.47	1.5	4.7	15	47	150	470	1500	4700	15K	47K	150K	470K	1.5	4.7	15
0.18	0.56	1.8	5.6	18	56	180	560	1800	5600	18K	56K	180K	560K	1.8	5.6	18
0.22	0.68	2.2	6.8	22	68	220	680	2200	6800	22K	68K	220K	680K	2.2	6.8	22
0.27	0.82	2.7	8.2	27	82	270	820	2700	8200	27K	82K	270K	820K	2.7	8.2	.....

5% INSULATED RC AND BWH TYPES

TYPE RC 5% FIXED COMPOSITION—SPECIFY VALUES WANTED

Stock No.	Mfr's Type		MIL Equivalent	Watts	Values See Table "A"	EACH	May Be Assorted (Order Each Value in Multiples of 10) EACH				
	New	Old				1-9	10-99	100-499	500-999	1000-2499	2500-4999
45 A 7155 C	RC-¼	GBT-¼	RC07GF	¼	2.7Ω to 1 meg	.15	.09	.08	.07	.06	.05
45 A 5005 C	RC-½	GBT-½	RC20GF	½	2.7Ω to 22 meg	.15	.09	.08	.07	.06	.05
45 A 5025 C	RC-1	GBT-1	RC32GF	1	10Ω to 22 meg	.30	.12	.11	.10	.09	.08
45 A 5045 C	RC-2	SR-2	RC42GF	2	10Ω to 22 meg	.35	.27	.23	.20	.17	.16

TYPE BWH 5% 2-WATT FIXED WIREWOUND—SPECIFY VALUES WANTED—TO 1800 OHMS ONLY

Stock No.	Mfr's Type	MIL Equivalent	Watts	Values See Table "B"	EACH	May Be Assorted (Order Each Value in Multiples of 5) EACH				
					1-4	5-99	100-499	500-999	1000-2499	2500-4999
45 A 5078 C	BWH	....	2	.10Ω to 9.1Ω	.30	.17	.16	.15	.14	.13
45 A 5079 C	BWH	....	2	10Ω to 1500Ω	.30	.17	.16	.15	.14	.13
45 A 5024 C	BWH	....	2	1600Ω to 1800Ω	.30	.17	.16	.15	.14	.13

TABLE "B"—5% EIA (RETMA) VALUES—SPECIFY RESISTANCE WANTED

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Megs	Megs	Meg
0.10	0.39	1.5	5.6	22	82	330	1200	4700	18K	68K	270K	1.0	3.9	15
0.11	0.43	1.6	6.2	24	91	360	1300	5100	20K	75K	300K	1.1	4.3	16
0.12	0.47	1.8	6.8	27	100	390	1500	5600	22K	82K	330K	1.2	4.7	18
0.13	0.51	2.0	7.5	30	110	430	1600	6200	24K	91K	360K	1.3	5.1	20
0.15	0.56	2.2	8.2	33	120	470	1800	6800	27K	100K	390K	1.5	5.6	22
0.16	0.62	2.4	9.1	36	130	510	2000	7500	30K	110K	430K	1.6	6.2	.....
0.18	0.68	2.7	10	39	150	560	2200	8200	33K	120K	470K	1.8	6.8	.....
0.20	0.75	3.0	11	43	160	620	2400	9100	36K	130K	510K	2.0	7.5	.....
0.22	0.82	3.3	12	47	180	680	2700	10K	39K	150K	560K	2.2	8.2	.....
0.24	0.91	3.6	13	51	200	750	3000	11K	43K	160K	620K	2.4	9.1	.....
0.27	1.0	3.9	15	56	220	820	3300	12K	47K	180K	680K	2.7	10	.....
0.30	1.1	4.3	16	62	240	910	3600	13K	51K	200K	750K	3.0	11	.....
0.33	1.2	4.7	18	68	270	1000	3900	15K	56K	220K	820K	3.3	12	.....
0.36	1.3	5.1	20	75	300	1100	4300	16K	62K	240K	910K	3.6	13	.....

Metal-Glaze and Power Resistors, Assortments

IRC LOW-COST METAL-GLAZE 2% AND 5% RESISTORS

-glaze film is up to 100 times thicker than convenitional films. Offers excellent tem- ıre coefficients across a wide resistance range. Average resistance changes less than after 1000 hours, full load at 70°C. Derated to 0 at 150°. Av. wt. per 100, 6 oz.

2%-TOLERANCE RESISTORS

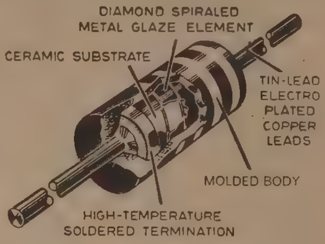
tock No.	Mfr's Type	Watts	Stock Values—See Table Below	EACH 1-99	100-249	250-999	1000-4999
5028 C	RG07	¼	51 ohms to 150K	.28	.18	.12	.08
5029 C	RG20	½	51 ohms to 470K	.25	.16	.10	.07

5%-TOLERANCE RESISTORS

tock No.	Mfr's Type	Watts	Stock Values—See Table Below	EACH 1-99	100-249	250-999	1000-4999
5030 C	RG07	¼	51 ohms to 150K	.25	.16	.10	.07
5031 C	RG20	½	51 ohms to 470K	.24	.15	.09	.06

ABLE OF STANDARD RESISTANCE VALUES—SPECIFY VALUES WANTED

Ohm	Ohm	Ohm	Ohm	Ohm	Ohm	Ohm	Ohm	Ohm	Ohm	Ohm	Ohm
100	200	390	750	1500	3300	5600	10K	18K	33K	56K	100K
110	220	430	820	1600	3600	6200	11K	20K	36K	62K	110K
120	240	470	910	1800	3900	6800	12K	22K	39K	68K	120K
130	270	510	1000	2000	4300	7500	13K	24K	43K	75K	130K
150	300	560	1100	2400	4700	8200	15K	27K	47K	82K	150K
160	330	620	1200	2700	5100	9100	16K	30K	51K	91K	470K
180	360	680	1300	3000	. . .	.....	.....	...	.....	.....	.. .


DIAMOND SPIRALED METAL GLAZE ELEMENT
CERAMIC SUBSTRATE
TIN-LEAD ELECTRO PLATED COPPER LEADS
MOLDED BODY
HIGH-TEMPERATURE SOLDERED TERMINATION

Features a unique, thick-film resistance element made of glass and special metal alloys, fused to a crystalline ceramic core. Withstands high temperatures and overloads. Meets MIL-R-22684B. Performs better than MIL-R-11 units.

TYPE AS 1% AND 5% POWER RESISTORS

AS10 10W
200 Ω 1%

ıre wirewound resistors incor- g "Thermacoat"—a solvent- t silicone coating formulation gh dielectric strength and heat ties. Carry full power even at 125°C ambients, expanding design limits significantly. Welded connections. Meet MIL V 6C). Temperature coefficient less than 20 ppm/°C. Max- vorking voltages are 150 volts for Type AS-2, and 400 volts e AS-5A. Av. wt. 1 oz.

1%—TYPE AS-2 2-WATT (½x¼")

k	Val. Avail. In Ohms See Table at Right	EACH 1-9	10-24	25-49	50-99	100-249
67 C	1.0 to 1000	.98	.73	.57	.54	.50
68 C	1100 to 4700	1.07	.81	.64	.60	.55
69 C	5100 to 10K	1.10	.84	.66	.62	.57
70	15K	1.12	.86	.68	.64	.60
66 C	16K to 20K	1.19	.90	.72	.67	.63

1%—TYPE AS-5A 5-WATT (1⁵⁄₁₆x¹¹⁄₃₂")

k	Val. Avail. In Ohms See Table at Right	EACH 1-9	10-24	25-49	50-99	100-249
73 C	1.0 to 1000	1.00	.75	.59	.56	.52
74 C	1100 to 4700	1.09	.83	.66	.62	.57
75 C	5100 to 10K	1.12	.86	.68	.64	.59
76	15K	1.14	.88	.70	.66	.62
77 C	16K to 20K	1.21	.92	.74	.69	.65
78 C	22K to 39K	1.28	.98	.78	.74	.68
79	51K	1.39	1.05	.85	.79	.74

5%—TYPE AS-2 2-WATT (½x¼")

Stock No.	Val. Avail. in Ohms See Table Below	EACH 1-9	10-24	25-49	50-99	100-249
45 A 6160 C	1.0 to 1000	.44	.40	.37	.31	.24
45 A 6161 C	1100 to 4700	.47	.43	.36	.34	.27
45 A 6162 C	5100 to 10K	.48	.44	.41	.35	.28
45 A 6163	15K	.52	.45	.42	.38	.31
45 A 6164 C	16K to 20K	.55	.47	.43	.41	.34

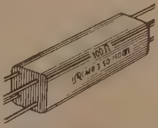
5%—TYPE AS-5A 5-WATT (1⁵⁄₁₆x¹¹⁄₃₂")

Stock No.	Val. Avail. in Ohms See Table Below	EACH 1-9	10-24	25-49	50-99	100-249
45 A 6165 C	1.0 to 1000	.48	.41	.37	.33	.28
45 A 6166 C	1100 to 4700	.50	.43	.39	.35	.29
45 A 6167 C	5100 to 10K	.51	.44	.40	.36	.30
45 A 6168	15K	.52	.45	.42	.38	.31
45 A 6169 C	16K to 20K	.54	.46	.43	.39	.33

OHM VALUES AVAILABLE FROM STOCK—SPECIFY VALUES

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohm
1.0	4.7	12	33	120	300	820	2400	5600	20K
1.2	5.1	13	39	130	330	910	2700	6200	22K
1.5	5.6	15	51	150	360	1000	3000	6800	27K
2.0	6.2	16	56	160	430	1100	3300	7500	30K
2.2	6.8	18	68	180	510	1500	3600	8200	36K
2.4	7.5	20	75	200	560	1600	3900	10K	39K
2.7	8.2	22	82	220	620	1800	4300	15K	51K
3.0	9.1	24	91	240	680	2000	4700	16K	......
3.3	10	30	100	270	750	2200	5100	18K	. . .

MULTI-RANGE 10-WATT WIREWOUND RESISTORS



R. Versatile resistors combining 4 10-watt elements in a single, t steatite housing. With instructions necting element leads to provide up different resistance values within ges listed below. Size, 1⅞x½". Shpg. z. **2 resistors per pkg.**

	Mfr's Type	Resistance Range	Resistor Elements (Ohms)	PER PKG.
80	MR1	47 values; 0.5-15 ohms	1, 2, 4, 8	1.20
81	MR2	47 values; 5.0-150 ohms	10, 20, 40, 80	1.20
82	MR3	47 values; 50-1500 ohms	100, 200, 400, 800	1.20
83	MR4	47 values; 500 ohms-15K	1000, 2000, 4000, 8000	1.20
84	MR5	12 values; 3000 ohms-50K	10K, 10K, 15K, 15K	1.80

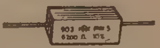
Power Resistor Assortment. Includes 2 of each Type MR listed in the table above. Provides complete 10-watt re- coverage—resistance values range all the way from 0.5 50K. Supplied in convenient plastic box. Size, 1¼x5¼x hpg. wt., 1 lb.
585 ....6.60

IED COLOR-CODE GUIDE

des color code, tolerance code, g of EIA-JAN 5 and 10% std. values. 2x4¾". FREE with more resistors. 2 oz.
6770 .... .25

IRC 10% 5 AND 10-WATT POWER RESISTORS

TYPES PW-5 AND PW-10



Popular axial-lead power resistors. Compact shape fits easily among other components. Precisely-wound element has glass fiber core, and is sealed in a rectangular ceramic case. Tolerance is ±10%. Power ratings are at 25° C ambient. 1½" leads.

Type PW-5 5 Watt. Size, ⅞x⅜x¹¹⁄₃₂". Available in values of 1 to 6000 ohms only. **Specify values from Table below.** *Inquire for prices on quantities of 1000 or more.* Shpg. wt., 2 oz.

45 A 5175 C. 1-99 .... **Each .25**
100-499 .... **Each .17** **500-999** .... **Each .13**

PW-5 VALUES AVAILABLE—SPECIFY VALUES WANTED (OHMS)

1.0	7.5	30	125	350	750	1500	3000
2.0	10	50	150	400	800	1750	4000
3.0	15	75	200	500	1000	2000	4500
4.0	20	100	250	600	1200	2250	5000
5.0	25	120	300	700	1250	2500	6000

Type PW-10 10 Watt. Size, 1⅞x⅜x¹¹⁄₃₂". **Specify values when ordering—see Table of values available below.** *Inquire for prices on quantities of 1000 or more.* Shpg. wt., 2 oz.
45 A 5190 C. 1-99 .... **Each .36**
100-499 .... **Each .25** **500-999** .... **Each .19**

PW-10 VALUES AVAILABLE—SPECIFY VALUES WANTED (OHMS)

1.0	7.5	30	150	600	2000	10K
2.0	10	40	200	750	3000	12K
3.0	15	50	250	1000	3500	20K
4.0	20	75	300	1200	5000	25K
5.0	25	100	500	1500	6000	....

Ohmite "Little-Devil" Resistors and Assortment

Insulated, molded composition resistors. Choose from 10% or 5% tolerances. Color coded for fast, easy identification; tinned leads for easy soldering. Meet MIL-R-11E specifications. Carefully manufactured, can be used at full wat ratings to 158° F. Breakdown ratings: 150 V; ¼ W, 250 V; ½ W, 350 V; 1 W, 50 2 W, 750 V. Shpg. wt., per 100, 10 oz.

10% RESISTORS—SPECIFY VALUES FROM OHMS TABLE "A" BELOW

Stock No.	Watts	Mil Style	Values—See Table Below	EACH						
				May Be Asstd.			Asstd—Minimum 100 Per Valu			
				1-4	5-49	50-Up	100-249	250-499	500-999	1000-
45 A 6037 C	⅛	RC05GF	2.7 ohms to 8.2 ohms	.27	.22	.18	.16	.14	.13	.12
45 A 6038 C	⅛	RC05GF	10 ohms to 22 meg	.24	.20	.16	.14	.13	.12	.11
45 A 6451 C	¼	RC07GF	2.7 ohms to 8.2 ohms	.14	.12	.08	.06	.06	.05	.04
45 A 6450 C	¼	RC07GF	10 ohms to 22 meg	.13	.11	.07	.05	.05	.04	.04
45 A 6039 C	½	RC20GF	1 ohm to 2.2 ohms	.13	.11	.07	.05	.05	.04	.04
45 A 6040 C	½	RC20GF	2.7 ohms to 22 meg	.12	.10	.08	.07	.06	.05	.04
45 A 6060 C	1	RC42GF	2.7 ohms to 22 meg	.18	.15	.09	.08	.07	.06	.05
45 A 6080 C	2	RC42GF	10 ohms to 22 meg	.24	.20	.15	.11	.10	.09	.08

5% RESISTORS—SPECIFY VALUES FROM OHMS TABLE "B" BELOW

Stock No.	Watts	Mil Style	Values—See Table Below	1-4	5-49	50-Up	100-249	250-499	500-999	1000-
45 A 6042 C	⅛	RC05GF	2.7 ohms to 9.1 ohms	.37	.31	.25	.22	.19	.18	.17
45 A 6043 C	⅛	RC05GF	10 ohms to 22 meg	.34	.28	.23	.20	.18	.16	.15
45 A 6456 C	¼	RC07GF	2.7 ohms to 9.1 ohms	.29	.24	.16	.11	.10	.08	.07
45 A 6455 C	¼	RC07GF	10 ohms to 22 meg	.26	.22	.14	.10	.09	.08	.07
45 A 6044 C	½	RC20GF	1 ohm to 2.4	.26	.22	.14	.10	.09	.08	.07
45 A 6045 C	½	RC20GF	2.7 ohms to 22 meg	.24	.20	.12	.09	.08	.07	.06
45 A 6065 C	1	RC32GF	2.7 ohms to 22 meg	.36	.30	.18	.13	.12	.11	.09
45 A 6085 C	2	RC42GF	10 ohms to 22 meg	.48	.40	.24	.19	.18	.17	.16

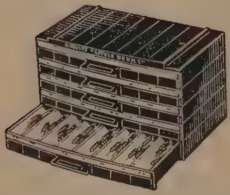
TABLE "A" 10% TOLERANCE RESISTORS—SPECIFY VALUES WANTED

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Meg	Meg
1	2.7	6.8	18	47	120	330	820	2200	5600	15K	39K	100K	270K	680K	1.8	4.7
1.2	3.3	8.2	22	56	150	390	1000	2700	6800	18K	47K	120K	330K	820K	2.2	5.6
1.5	3.9	10	27	68	180	470	1200	3300	8200	22K	56K	150K	390K	1.0 meg	2.7	6.8
1.8	4.7	12	33	82	220	560	1500	3900	10K	27K	68K	180K	470K	1.2 meg	3.3	8.2
2.2	5.6	15	39	100	270	680	1800	4700	12K	33K	82K	220K	560K	1.5 meg	3.9	10

TABLE "B" 5% TOLERANCE RESISTORS—SPECIFY VALUES WANTED (Ohms, except *Megs)

1.0	2.4	5.6	13	33	75	180	430	1000	2400	5600	13K	33K	75K	180K	430K	1.0*	2.4*	5.6*
1.1	2.7	6.2	15	36	82	200	470	1100	2700	6200	15K	36K	82K	200K	470K	1.1*	2.7*	6.2*
1.2	3.0	6.8	16	39	91	220	510	1200	3000	6800	16K	39K	91K	220K	510K	1.2*	3.0*	6.8*
1.3	3.3	7.5	18	43	100	240	560	1300	3300	7500	18K	43K	100K	240K	560K	1.3*	3.3*	7.5*
1.5	3.6	8.2	20	47	110	270	620	1500	3600	8200	20K	47K	110K	270K	620K	1.5*	3.6*	8.2*
1.6	3.9	9.1	22	51	120	300	680	1600	3900	9100	22K	51K	120K	300K	680K	1.6*	3,9*	9.1*
1.8	4.3	10	24	56	130	330	750	1800	4300	10K	24K	56K	130K	330K	750K	1.8*	4.3*	10 *
2.0	4.7	11	27	62	150	360	820	2000	4700	11K	27K	62K	150K	360K	820K	2.0*	4.7*	11 *
2.2	5.1	12	30	68	160	390	910	2200	5100	12K	30K	68K	160K	390K	910K	2.2*	5.1*	12 *

RESISTOR ASSORTMENTS



Wide selection of industrial and service assortments. In handy plastic cabinets, 4¾x9x5¼", with 5 drawers and 40 compartments. CAB-2, 3, 4 and 10. Service assortment, 10% tolerance. 1 cabinet. CAB-25, 26 and 27. Industrial assortment, 10% tolerance. 2 cabinets. CAB-45, 46, 47, and 48. Industrial assortment, 5% tolerance. 4 cabinets.

CAB-2. 1 watt. 125 total. 1 each: 10, 15, 27, 47, 100, 150, 270, 330, 470, 680, 1500, 2200, 6800, 33K, 68K, 82K ohms; .22, .33, .68, 1.5, 2.2, 2.7, 3.9, 4.7, 6.8, 10 meg. 3 each: 1000, 2700, 15K ohms. 5 each: 4700, 22K, 39K ohms; .15, meg. 10 each: 10K, 27K, 47K ohms: .10, .27, .47, 1.0 meg.
45 A 6759. Shpg. wt., 2 lbs............................22.50

CAB-3. 2 watts. 125 total. Same quantities and values as above.
45 A 6762. Shpg. wt., 2 lbs............................30.00

CAB-4. ¼-watt. 150 total. 1 each: 150, 330, 680, ohms; .68, 1.5, 2.2, 2.7, 3.9, 4.7, 6.8, 10.0 meg. 2 each: 82K, ohms. 3 each: 270, 470, 33K, 39K, 68K ohms; .15, .22, .27, .33 meg. 5 each: 47, 100, 1500, 2700, 6800, 10K, 15K, 22K, 27K, 47K ohms; .47 meg. 10 each: 1000, 2200, 4700, 10K ohms; .10, 1.0 meg.
45 A 6760. Shpg. wt., 2¼ lbs............................19.50

CAB-10. ½ watt. 150 total. As CAB-4, except: 1 each: 10, 15, 27, 47, 1500, 2200, 6800, 82K ohms. 3 each: 2700, 15K ohms; 2.7 meg. 5 each: 1000, 39K ohms, .15 meg. 10 each: 27K ohms, .27 meg.
45 A 6761. Shpg. wt., 2¼ lbs............................18.00

CAB-25. ¼ watt. 1000 total. 5 each: 2.7, 3.3, 3.9, 4.7, 5.6, 6.8, 12, 15, 18, 22, 27, 33, 39, 56, 68, 82, 120, 180, 390, 560, 820, 1000. 1200, 1800, 5600, 39K, 82K ohms; .12, .15, .18, .27, .39, .56, .68, .82, 1.2, 1.5, 1.8, 2.2, 2.7, 3.3, 3.9, 4.7, 5.6, 6.8, 10, 15, 22 meg. 20 each: 10, 47, 150, 220, 330, 470, 680, 1500, 2700, 3900, 8200, 12K, 18K, 27K, 33K, 56K, 68K ohms; .22, .33, .47 meg. 30 each: 100, 270, 2200, 3300, 4700, 6800, 10K, 15K, 22K, 47K ohms; .10, 1 meg.
45 A 6763. Shpg. wt., 14 lbs........................... 70.00

CAB-26. ½-watt. 1000 total. As CAB-25 except: 5 each: 3900, 8200, 15K, 18K ohms. 15 each: 150, 270, 330, 560, 680, 1800, 2700, 6800, 12K, 39K, 56K, 82K ohms; .15, .33, 2.2, 3.3 meg. 20 each: 3300, 5600 ohms; .27 meg. 30 each: 470, 1000 ohms; .47 meg.
45 A 6764. Shpg. wt., 14 lbs............................60.00

CAB-27. 1-watt. 600 total. As CAB-25, except: 5 each: 8200, 1 18K, 56K, 68K ohms; .33 meg. 10 each: 2.7, 4.7, 6.8, 10, 15, 22, 33, 47, 100, 150, 220, 270, 330, 390, 470, 560, 680, 1000, 1200, 1 2200, 2700, 3300, 3900, 4700, 6800, 10K, 15K, 22K, 27K, 33K, 3 47K ohms; .10, .15, .22, .27, .47, .82 meg.
45 A 6765. Shpg. wt., 14 lbs............................5

CAB-45. ⅛-watt. 1000 total. 5 each: 2.7, 3.0, 3.3, 3.6, 3.9, 4.7, 5.6, 6.8, 7.5, 8.2, 9.1, 11, 12, 15, 16, 18, 20, 22, 24, 27, 30, 33, 39, 43, 56, 62, 68, 75, 82, 91, 110, 120, 130, 150, 160, 200, 240, 300, 330, 360, 390, 430, 510, 560, 620, 680, 750, 820, 910, 1100, 1 1600, 1800, 2400, 3000, 3300, 3600, 4300, 5600, 6200, 6800, 7 8200, 9100, 11K, 13K, 15K, 16K, 18K, 20K, 22K, 24K, 27K, 3 33K, 36K, 39K, 43K, 51K, 56K, 62K, 68K, 75K, 82K, 91K oh .11, .12, .13, .15, .16, .18, .20, .22, .24, .27, .30, .33, .36, .39, .43, .51, .56, .62, .68, .75, .82, .91, 1.0, 1.1, 1.2, 1.3, 1.5, 1.6, 1.8, 2.2, 2.4, 2.7, 3.0, 3.3, 3.6, 3.9, 4.3, 4.7, 5.1, 5.6, 6.2, 6.8, 7.5, 8.2, 12, 15, 18, 20, 22 meg. 10 each: 47, 51, 220, 470, 1200, 2700, 3 5100, 12K, 47K ohms. 20 each: 10, 100, 180, 1000, 1500, 2 2200, 4700, 10K ohms; 0.10 meg.
45 A 6766 U. Shpg. wt., 28 lbs..........................22

CAB-46. ¼ watt. 1500 total. As CAB-45, except: 5 each: 180 oh 10 each: 150, 270, 390, 510, 560, 680, 820, 1500, 2400, 3000, 6 18K, 27K, 30K, 39K, 51K, 68K, 82K ohms; .15, .20, .47, meg. 25 each: 10, 220, 330, 470, 1200, 1800, 2000, 2700, 3300, 3 5100, 5600, 8200, 12K, 20K, 22K, 33K, 47K ohms; 1.0 meg each: 100, 1000, 2200, 4700, 6800, 10K, 15K ohms; .10 meg. Sh wt., 28 lbs.
45 A 6767 U........................................21

CAB-47. ½ watt. 1500 total. As CAB-45, except: 5 each: 47, ohms. 15 each: 27, 51, 150, 200, 220, 270, 330, 390, 510, 560, 1200, 1800, 2700, 3000, 3900, 5100, 5600, 8200, 18K, 20K, 24K, 2 39K, 51K, 56K, 68K ohms; .15, .22 meg. 20 each: 75, 470, 6 12K, 33K, 47K ohms; .43, 1.0 meg. 30 each: 10, 100, 1000, 2 2200, 3300, 4700, 10K, 15K, 22K ohms; .10 meg.
45 A 6768 U. Shpg. wt., 28 lbs..........................18

CAB-48. 1-watt. 900 total. As CAB-45, except: 5 each: 47, 1500, 2700, 3900, 5100, 12K ohms. 10 each: 10, 100, 150, 200, 330, 510, 680, 1000, 2000, 2200, 4700, 10K, 22K, 47K ohms; meg. Shpg. wt., 28 lbs.
45 A 6769 U.......................................16

Ohmite Wirewound Resistors

STYLE 995-1A—1½ WATT 22/64x1/8"

tock No.	Stock Values (Ohms) See Table "A" Below	EACH 1-9	10-24	25-99	100-249
A 6088 C	1 to 1000	.62	.53	.43	.37
A 6089 C	1100 to 3000	.66	.56	.46	.40

STYLE 995-3A—3¼ WATT 35/64x13/64"

tock No.	Stock Values (Ohms)	1-9	10-24	25-99	100-249
A 6090 C	1 to 1000	.59	.50	.41	.35
A 6091 C	1100 to 5000	.62	.53	.43	.37
A 6092 C	5100 to 10K	.66	.56	.46	.40

STYLE 995-5B—5 WATT 15/16x13/32"

tock No.	Stock Values (Ohms)	1-9	10-24	25-99	100-249
A 6115 C	1 to 1000	.62	.53	.43	.37
A 6116 C	1100 to 5000	.66	.56	.46	.40
A 6117 C	5100 to 10K	.70	.60	.49	.42
A 6118 C	11K to 20K	.78	.66	.55	.47
A 6119 C	22K to 25K	.82	.70	.57	.49

STYLE 995-10A—11 WATT 1 25/32x5/16"

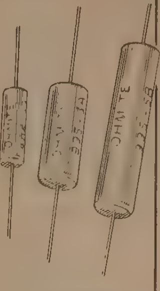
tock No.	Stock Values (Ohms)	1-9	10-24	25-99	100-249
A 6122 C	1 to 1000	.68	.58	.48	.41
A 6123 C	1100 to 5000	.73	.62	.51	.44
A 6124 C	5100 to 10K	.84	.71	.59	.50
A 6125 C	11K to 20K	.95	.81	.67	.57
A 6126 C	22K to 40K	1.00	.85	.70	.60
A 6127 C	43K to 51K	1.12	.95	.78	.67

ABLE "A" STOCK VALUES—FOR STYLE 995 ABOVE

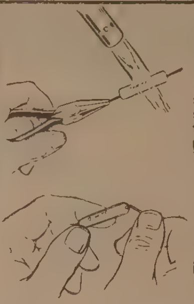
Specify Values Wanted in Ohms

3.3	8.2	25	56	180	430	820	2200	4700	9100	24K	50K
3.6	9.1	27	62	200	450	900	2400	5000	10K	25K	51K
3.9	10	30	68	220	470	910	2500	5100	11K	27K	.....
4.0	11	33	75	240	500	1000	2700	5600	12K	30K	.....
4.3	12	35	82	250	510	1100	3000	5000	13K	33K	.....
4.7	13	36	91	270	560	1200	3300	6200	14K	35K	.....
5.0	15	39	100	300	600	1300	3500	6800	15K	36K	.....
5.1	16	40	110	330	620	1400	3600	7000	16K	39K	.....
5.6	18	43	120	350	680	1500	3900	7500	17K	40K	.....
6.2	20	47	130	360	700	1600	4000	8000	18K	43K	.....
6.8	22	50	150	390	750	1800	4300	8200	20K	45K	.....
7.5	24	51	160	400	800	2000	4500	9000	22K	47K	.....

SERIES 99 VITREOUS-ENAMELED MOLDED RESISTORS



Series 99 Resistors

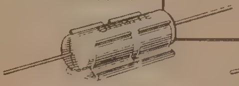


WITHSTAND VERY HIGH TEMPERATURES

Series 99 resistors show no sign of softening or deformation at temperatures up to 1500°F.

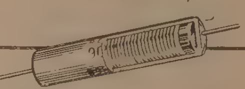
RESIST CHIPPING AND BREAKING

Densely molded jacket will not chip where leads enter body.



UNIFORM SIZE

Consistent size and shape Ideal for automated assembly.



HIGH-VOLTAGE INSULATION

1000 VAC Breakdown for molded vitreous enamel insulation.

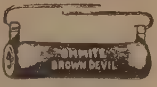
These wirewound resistors feature molded vitreous enamel coating for excellent insulation characteristics and heat dissipation. Uniform size—mount in metal clips for heat-sink effect allowing up to 100% wattage increase. Uniform insulation thickness for 1000 VAC breakdown rating. Identifying markings fired right onto coating. Consistent size and shape—ideal for automated assembly. Withstand high humidity, immersion in salt-solution. 1½" tinned leads. Tolerance, ±5%. Meet MIL-R-26 for RW57, RW58, RW59, RW67, RW68, RW69. Av. shpg. wt. per 25, 4 oz.

MOUNTING CLIPS FOR STYLE 99 RESISTORS

ct from mechanical shock. Have heat-sink effect for up to 100% increase in power rating. Av. shpg. wt. per 100, 3 oz.

tock No.	Mfr's Type	For Resistor	EACH 1-99	100-499	500-999	Stock No.	Mfr's Type	For Resistor	EACH 1-99	100-499	500-999
A 6096	5900	995-1A (1½-Watt)	.20	.15	.12	45 A 6098	5906	995-5B (5-Watt)	.20	.15	.12
A 6097	5904	995-3A (3¼-Watt)	.20	.15	.12	45 A 6099	5908	995-10A (11-Watt)	.20	.15	.12

TYPE 200 "BROWN DEVIL" WIREWOUND RESISTORS



selection of high-quality, compact, vound resistors. Specially designed for cations such as voltage dropping, bias ies, bleeders. Have thick vitreous el coating for excellent heat conduc- and insulation. Also fully protected st the harmful effects of humidity and moisture, preventing / and needless failure. Tolerance, ±5%. Overall size (excluding); 3-watt, 7/16x13/64"; 5¼-watt, 5/8x¼"; 8-watt, 1x5/16"; 12-watt, /16"; 20-watt, 2x7/16". 1½" leads. Specify values from Tables or "C" below. Av. shpg. wt., per 25, 8 oz.

STYLE 200-3—3-WATT (Values to 10K) See Table "B" Below

tock No.	Stock Values (Ohms) See Table "B" Below	EACH 1-9	10-24	25-99	100-249
5735 C	1 to 1000	.51	.43	.36	.31
5736 C	1100 to 4700	.55	.47	.39	.33
5737 C	5100 to 10K	.58	.49	.41	.35

YLE 200-5¼—5¼-WATT (Values to 20K) See Table "B" Below

tock No.	Stock Values (Ohms)	1-9	10-24	25-99	100-249
5738 C	1 to 1000	.55	.47	.39	.33
5739 C	1100 to 4700	.58	.49	.41	.35
5740 C	5100 to 10K	.61	.52	.43	.37
5741 C	11K to 20K	.68	.58	.48	.41

LE "B" STOCK VALUES—FOR 3 AND 5¼-WATT STYLES ABOVE—Specify Values Wanted

ms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
0	3.6	12	43	150	510	1800	6200
1	3.9	13	47	160	560	2000	6800
2	4.3	15	51	180	620	2200	7500
3	4.7	16	56	200	680	2400	8200
5	5.1	18	62	220	750	2700	9100
6	5.6	20	68	240	820	3000	10K
8	6.2	22	75	270	910	3300	11K
0	6.8	24	82	300	1000	3600	12K
2	7.5	27	91	330	1100	3900	13K
4	8.2	30	100	360	1200	4300	15K
7	9.1	33	110	390	1300	4700	16K
0	10	36	120	430	1500	5100	18K
3	11	39	130	470	1600	5600	20K

STYLE 200-8—8-WATT (Values to 10K) See Table "C" Below

Stock No.	Stock Values (Ohms) See Table "C" Below	EACH 1-9	10-24	25-99	100-249
45 A 5730 C	1 to 1000	.55	.47	.39	.33
45 A 5731 C	1100 to 5000	.58	.49	.41	.35
45 A 5732 C	6000 to 10K	.61	.52	.43	.37

STYLE 200-12—12-WATT (Values to 50K) See Table "C" Below

Stock No.	Stock Values (Ohms) See Table "C" Below	EACH 1-9	10-24	25-99	100-249
45 A 5700 C	1 to 1000	.60	.51	.42	.36
45 A 5701 C	1100 to 5000	.64	.54	.45	.38
45 A 5702 C	6000 and 10K	.74	.63	.52	.44
45 A 5703 C	12.5K to 20K	.83	.71	.58	.50
45 A 5704 C	25K and 30K	.87	.74	.61	.52
45 A 5705	50K	.98	.83	.69	.59

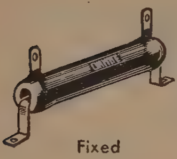
STYLE 200-20—20-WATT (In All Values Except * in Table "C")

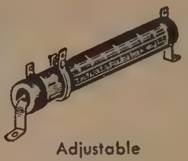
Stock No.	Stock Values (Ohms) See Table "C" Below	EACH 1-9	10-24	25-99	100-249
45 A 5720 C	1 to 1000	.71	.60	.50	.43
45 A 5721 C	1200 to 5000	.74	.63	.52	.44
45 A 5722 C	6000 to 10K	.87	.74	.61	.52
45 A 5723 C	12.5K to 20K	.89	.76	.62	.53
45 A 5724 C	25K and 30K	1.04	.88	.73	.62
45 A 5725 C	50K and 60K	1.21	1.03	.85	.73
45 A 5727	100K	1.65	1.40	1.16	.99

TABLE "C" STOCK VALUES—FOR 8, 12 AND 20-WATT STYLES ABOVE—Specify Values Wanted

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
1	15*	125*	500	1250	4500	15K
1.5*	20*	150	600*	1500	5000	20K
2	25	200	700	1750	6000	25K
3	30*	225*	750	2000	7000	30K
4	35*	250	800	2250	7500	50K
5	40*	300	900	2500	8000	60K
7.5*	50	350	1000	3000	9000	100K
10	75	400	1100*	3500	10K	....
12*	100	450*	1200	4000	12.5K	....

Power Resistors, TV Fuse Resistors, Thermistors





OHMITE WIREWOUND POWER RESISTORS

Fixed Types. For use as voltage droppers, bias resistors, and bleeders in applicat where resistance need not be varied. Resistance tolerance, ±5% for values 1 oh higher; ±10% for values below 1 ohm. **Adjustable Types.** For voltage dividing works, power supplies—anywhere adjustable resistance is required. Feature alloy wire, wound on quality ceramic cores and insulated by vitreous enamel coati Tolerance ±10%. With slider and mounting brackets. Wattage rating applies when entire resistance is in circuit: with center lug at intermediate point, ratin reduced in same proportion. Wattage ratings are for free air mounting. **Specify v when ordering.** Av. shpg. wt., 5-50 watts, 4 oz.; 100 watts and up, 1 lb.

FIXED POWER RESISTORS

STYLE 270-12—12 WATTS—1¾x5⁄16″

Stock No.	Resistance (Ohms)	EACH 1-9	10-24	25-99	100-249
45 A 5770 C	.51, 1.0, 1.5, 10, 15, 18, 33, 39, 47, 56, 68, 82, 100, 120, 150, 180, 220, 470, 560, 820, 1000	.60	.51	.42	.36
45 A 5771 C	1200, 1500, 2200, 3300, 3900, 4700	.64	.54	.45	.38
45 A 5772	10K	.74	.63	.52	.44
45 A 5773 C	12K, 15K	.83	.71	.58	.50
45 A 5774	22K	.87	.74	.61	.52
45 A 5775	51K	.98	.83	.69	.59

STYLE 270-25—25 WATTS—2x9⁄16″

Stock No.	Resistance (Ohms)	EACH 1-9	10-24	25-99	100-249
45 A 5776 C	1, 2, 3, 4, 5, 10, 15, 25, 50, 75, 100, 150, 200, 250, 500, 750. 800, 1000	.76	.65	.53	.46
45 A 5777 C	1500, 2000, 2500, 3000, 4000, 5000	.79	.67	.55	.47
45 A 5835 C	6000, 7500, 10K	.89	.76	.62	.53
45 A 5778 C	15K, 20K	.95	.81	.67	.57
45 A 5779 C	25K, 30K	1.09	.93	.76	.65
45 A 5780 C	50K, 60K	1.27	1.08	.89	.76

STYLE 270-50—50 WATTS—4x9⁄16″

Stock No.	Resistance (Ohms)	EACH 1-9	10-24	25-99	100-249
45 A 5769	1	1.63	1.39	1.14	.98
45 A 5783 C	2, 3, 4, 5, 10, 25, 50, 75, 100, 150, 200, 250, 500, 750, 800, 1000	1.17	.99	.82	.70
45 A 5784 C	1500, 2000, 2500, 5000	1.20	1.02	.84	.72
45 A 5785	10K	1.29	1.10	.90	.77
45 A 5836	20K	1.42	1.21	.99	.85
45 A 5786	25K	1.62	1.38	1.13	.97
45 A 5787	50K	1.81	1.54	1.27	1.09
45 A 5789	100K	2.24	1.90	1.57	1.34

STYLE 270-100—100 WATTS—6½x¾″

Stock No.	Resistance (Ohms)	EACH 1-9	10-24	25-99	100-249
45 A 5768 C	1, 2, 3	2.27	1.93	1.59	1.36
45 A 5795 C	4, 5, 10, 25, 50, 75, 100, 125, 150, 250, 500, 1000	1.62	1.38	1.13	.97
45 A 5796 C	1500, 2000, 2500	1.68	1.43	1.18	1.01
45 A 5797 C	7500, 10K	1.82	1.55	1.27	1.09
45 A 5798	20K	1.96	1.67	1.37	1.18
45 A 5801	50K	2.32	1.97	1.62	1.39
45 A 5803	100K	2.89	2.46	2.02	1.73

STYLE 270-175—175 WATTS—8½x1⅛″

Stock No.	Resistance (Ohms)	EACH 1-9	10-24	25-99	100-249
45 A 5837 C	3, 5	3.35	2.85	2.35	2.01
45 A 5838 C	10, 25, 50, 75, 100, 125, 150	2.39	2.03	1.67	1.43
45 A 5841	10K	2.66	2.26	1.86	1.60
45 A 5845	75K	3.23	2.75	2.26	1.94
45 A 5846	100K	3.42	2.91	2.39	2.05

STYLE 270-225—225 WATTS—10½x1⅛″

Stock No.	Resistance (Ohms)	EACH 1-9	10-24	25-99	100-249
45 A 5847 C	1, 2, 3, 4, 5	3.61	3.07	2.53	2.17
45 A 5848 C	10, 25, 50, 75, 100, 150, 250, 500, 1000	2.58	2.19	1.81	1.55
45 A 5849 C	2000, 2500, 3000, 5000	2.66	2.26	1.86	1.60
45 A 5850	10K	2.85	2.42	2.00	1.71
45 A 5851 C	15K, 20K	3.03	2.58	2.12	1.82
45 A 5853	50K	3.23	2.75	2.26	1.94
45 A 5855	100K	3.63	3.09	2.54	2.18

DIVIDOHM ADJUSTABLE RESISTORS

STYLE 210-12—12 WATTS—1¾x5⁄16″

Stock No.	Resistance (Ohms)	EACH 1-9	10-24	25-99
45 A 5804 C	1, 2, 3, 5, 7.5, 10, 15, 20, 25, 50, 75, 100, 150, 200, 250, 300, 400, 500, 750, 1000	1.20	1.02	.84
45 A 5805 C	1250, 1500, 2000, 2500, 3000, 3500, 5000	1.24	1.05	.87
45 A 5806 C	7000, 7500, 8000, 10K	1.33	1.13	.93

45 A 5764. Extra Slider for 12-Watt Types....................

STYLE 210-25—25 WATTS—2x9⁄16″

Stock No.	Resistance (Ohms)	EACH 1-9	10-24	25-99
45 A 5807 C	1, 2, 3, 5, 10, 15, 20, 25, 50, 75, 100, 150, 200, 300, 400, 500, 750, 1000	1.35	1.15	.95
45 A 5808 C	1500, 2000, 2500, 3000, 5000	1.39	1.18	.97
45 A 5809 C	7500, 10K	1.49	1.27	1.04
45 A 5811	25K	1.69	1.44	1.18

STYLE 210-50—50 WATTS—4x9⁄16″

Stock No.	Resistance (Ohms)	EACH 1-9	10-24	25-99
45 A 5812	1	2.23	1.90	1.56
45 A 5813 C	2, 3, 4, 5, 10, 25, 50, 75, 100, 150, 200, 250, 300, 400, 500, 750, 1000	1.76	1.50	1.23
45 A 5814 C	1500, 2000, 2500, 4000, 5000	1.80	1.53	1.26
45 A 5815	10K	1.89	1.61	1.32
45 A 5816 C	15K, 20K	2.02	1.72	1.41
45 A 5817 C	25K, 30K, 40K	2.22	1.89	1.55
45 A 5818	50K	2.40	2.04	1.68

STYLE 210-75—75 WATTS—6x9⁄16″

Stock No.	Resistance (Ohms)	EACH 1-9	10-24	25-99
45 A 5856 C	1, 2	2.51	2.13	1.76
45 A 5857 C	5,10,15,25,50,100,200,250,300,1000	1.96	1.67	1.37

45 A 5765. Extra Slider for 25, 50 and 75-Watt Types.........

STYLE 210-100—100 WATTS—6½x¾″

Stock No.	Resistance (Ohms)	EACH 1-9	10-24	25-99
45 A 5821 C	1, 2, 3	2.87	2.44	2.01
45 A 5822 C	4, 5, 10, 25, 50, 100, 250, 500, 1000	2.22	1.89	1.55
45 A 5823	5000	2.28	1.94	1.60
45 A 5828	100K	3.49	2.97	2.44

45 A 5766. Extra Slider for 100-Watt Types...................

STYLE 210-225—225 WATTS—10½x1⅛″

Stock No.	Resistance (Ohms)	EACH 1-9	10-24	25-99
45 A 5829 C	1, 2, 3, 4, 5	4.54	3.86	3.18
45 A 5830 C	10, 25, 50, 100, 250, 500, 1000	3.51	2.98	2.46
45 A 5831	5000	3.58	3.04	2.51

EXTRA MOUNTING BRACKETS FOR RESISTORS

For mounting fixed and adjustable tubular-core resistors. Wt.,

Stock No.	Type No.	For Resistor Core O. D.	For Resistor Watts	PKG. OF 100 1-9	10-24	25
45 A 5894	5	5⁄16″	12	1.47	1.25	1.
45 A 5895	9	9⁄16″	25, 50, 75	1.68	1.43	1.
45 A 5896	12	¾″	100	3.15	2.68	2.
45 A 5897	18	1⅛″	175, 225	4.20	3.57	2.

HAMILTON HALL TV FUSE-RESISTORS

Replace similar units in Raytheon, RCA, Motorola, Sylvania, Zenith and other TV receivers. All units are less than an inch in length; tinned leads for quick and easy installation. Wt., 2 oz.

Stock No.	Mfr's Type	Ohms	EACH 1-9	10-49	50-99	100-Up
45 A 6021	FR-4.7	4.7	.29	.24	.18	.16
45 A 6022	FR-5.6	5.6	.29	.24	.18	.16
45 A 6023	FR-7.5	7.5	.29	.24	.18	.16
45 A 6025	FR-22	22.0	.29	.24	.18	.16

PL-99R Fuse-Resistor Kit. Has: six 7.5-ohm types, plus one each 4.7, 5.6, 9.0, 22-ohm types. Shpg. wt., 1 lb.

45 A 6026..1.95

G-C GLO-BAR THERMISTORS

These reliable thermal resistors are especially signed for series-string filament circuits in a variety of electrical components. Feature stab and fast response at a low cost. Have a large tem ature coefficient of resistance. For use in RCA, Admiral, Ph G.E., Motorola and a variety of other manufacturer's televi receivers. An absolutely necessary addition to every servicem tube caddy or work bench. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Ohms Hot	Ohms Cold	Replaces	EACH 1-9	10-
45 A 6066	25-912	20	250	G.E. RRW051	1.10	1.
45 A 6053	25-920	11	600	M'rola 6A73541	1.84	1.
45 A 6071	25-928	9	600	RCA 100118	1.22	1.

Ohmite Wirewound Rheostats, Potentiometers

VITREOUS-ENAMELED RHEOSTATS FROM 25 WATTS TO 100 WATTS

d wirewound rheostats; all are vitreous enameled (except Types 4200, 3, -4), silicone ceramic. Cannot smoke, char, shrink or shift. Have copper e brushes, except *silver-graphite brushes. Ratings at full setting. U.L. nent Program Recog., except† Types H, J and K mount on panels up to k; Dimensions: Type H, 1⁹⁄₁₆" dia., 1⅜" depth behind panel; J, 2⁵⁄₁₆" dia., pth; K, 3⅛" dia., 1¾" depth. **Less knobs; see knobs, dial plates and ng kits listed below.** Av. shpg. wt., 8 oz.

25 WATT—TYPE H

k	Mfr's Type	Ohms	EACH 1-4	EACH 5-9	EACH 10-24
223	0140*	1	5.05	4.29	3.38
224	0141	2	5.05	4.29	3.38
225	0142	3	5.05	4.29	3.38
226	0143	6	5.05	4.29	3.38
227	0144	9	5.05	4.29	3.38
228	0145	10	5.05	4.29	3.38
229	0146	15	4.55	3.87	3.05
230	0147	25	4.55	3.87	3.05
231	0148	35	4.55	3.87	3.05
232	0149	50	4.55	3.87	3.05
234	0150	75	4.55	3.87	3.05
236	0151	100	4.55	3.87	3.05
237	0152	125	4.55	3.87	3.05
238	0153	175	4.55	3.87	3.05
239	0154	250	4.55	3.87	3.05
240	0155	350	4.55	3.87	3.05
241	0156	500	4.55	3.87	3.05
242	0157	750	4.55	3.87	3.05
244	0158	1000	5.05	4.29	3.38
245	0159	1500	5.05	4.29	3.38
246	0160	2500	5.05	4.29	3.38
247	0161	3500	5.35	4.55	3.58
248	0162	5000	5.35	4.55	3.58
150	4200†	7500	5.55	4.72	3.72
151	4201†	10K	5.55	4.72	3.72
152	4202†	15K	6.05	5.14	4.05
153	4203†	20K	6.80	5.78	4.56
154	4204†	25K	7.50	6.38	5.03

50 WATT—TYPE J

249	0308*	0.5	5.65	4.80	3.79
250	0309*	1	5.65	4.80	3.79
251	0310*	2	5.65	4.80	3.79
252	0311	4	5.65	4.80	3.79
253	0312	6	5.65	4.80	3.79
254	0313	8	5.05	4.29	3.38
255	0314	12	5.05	4.29	3.38
256	0315	16	5.05	4.29	3.38
257	0316	22	5.05	4.29	3.38

50 WATT—TYPE J (Cont'd)

Stock No.	Mfr's Type	Ohms	EACH 1-4	EACH 5-9	EACH 10-24
46 A 7258	0317	35	5.05	4.29	3.38
46 A 7259	0318	50	5.05	4.29	3.38
46 A 7260	0319	80	5.05	4.29	3.38
46 A 7261	0320	125	5.05	4.29	3.38
46 A 7262	0321	150	5.05	4.29	3.38
46 A 7263	0322	225	5.05	4.29	3.38
46 A 7264	0323	300	5.05	4.29	3.38
46 A 7265	0324	500	5.05	4.29	3.38
46 A 7266	0325	800	5.35	4.55	3.58
46 A 7267	0326	1000	5.35	4.55	3.58
46 A 7268	0327	1600	5.35	4.55	3.58
46 A 7269	0328	2500	5.35	4.55	3.58
46 A 7270	0329	3500	5.65	4.80	3.79
46 A 7271	0330	5000	5.65	4.80	3.79
46 A 7272	0331	8000	5.65	4.80	3.79
46 A 7273	0332	10K	5.65	4.80	3.79

100 WATT—TYPE K

46 A 7274	0440*	0.5	8.45	7.18	5.66
46 A 7275	0441*	1	8.45	7.18	5.66
46 A 7276	0442*	2	8.45	7.18	5.66
46 A 7277	0443*	3	8.45	7.18	5.66
46 A 7278	0444*	5	8.45	7.18	5.66
46 A 7279	0445	7.5	8.45	7.18	5.66
46 A 7280	0446	10	8.45	7.18	5.66
46 A 7281	0447	16	7.95	6.76	5.33
46 A 7282	0448	25	7.95	6.76	5.33
46 A 7283	0449	50	7.95	6.76	5.33
46 A 7284	0450	75	7.95	6.76	5.33
46 A 7285	0451	100	7.95	6.76	5.33
46 A 7286	0452	200	7.95	6.76	5.33
46 A 7287	0453	300	7.95	6.76	5.33
46 A 7289	0455	500	7.95	6.76	5.33
46 A 7290	0456	750	7.95	6.76	5.33
46 A 7291	0457	1000	8.45	7.18	5.66
46 A 7293	0459	2000	8.45	7.18	5.66
46 A 7295	0461	5000	9.05	7.69	6.06
46 A 7297	0463	10K	10.20	8.67	6.83

DIAL PLATES AND KNOB

5000 **Dial Plate.** For Types H, J, and K rheostats. 2³⁄₁₆" diameter. Handsomely finished ight figures and lines on etched black background. With 0-100 scale. Shpg. wt., 2 oz.
945. 1-4........................**Each .30** 5-9........................**Each .26**

150 **Knob.** Handsomely molded, black bakelight knob with 1½" finger-grip. For use with H, J and K rheostats (listed above). Shpg. wt., 2 oz.
944 1-4..........**Each .30** 5-9..........**Each .26** 10-24..........**Each .20**

TYPE E 12½-WATT RHEOSTATS

Compact miniature power rheostats for limited space applications. Smaller than many 1- or 2-watt potentiometers. Rugged, ceramic and metal construction. For high temperature applications; operate at maximum hot spot temperature of 340°C. Resistance tolerance is ±10%. Only ⅞" diameter. Require 1¹⁄₁₆" behind panel. ¼" by 32 threaded bushing ¼" long. ⅛" diameter shaft. ⅜" long Less knob, listed below. Av. shpg. wt., 2½ oz.

Stock No.	Mfr's Type	Ohms	EACH 1-4	EACH 5-9	EACH 10-24
46 A 7200	0101	1	5.05	4.29	3.38
46 A 7201	0102	2	5.05	4.29	3.38
46 A 7202	0103	3	5.05	4.29	3.38
46 A 7204	0105	8	5.05	4.29	3.38
46 A 7205	0106	10	5.05	4.29	3.38
46 A 7206	0107	15	4.55	3.87	3.05
46 A 7207	0108	25	4.55	3.87	3.05
46 A 7209	0110	50	4.55	3.87	3.05
46 A 7210	0111	75	4.55	3.87	3.05
46 A 7211	0112	100	4.55	3.87	3.05
46 A 7213	0114	175	4.55	3.87	3.05
46 A 7214	0115	250	4.55	3.87	3.05
46 A 7216	0117	500	4.55	3.87	3.05
46 A 7217	0118	750	4.55	3.87	3.05
46 A 7218	0119	1000	5.05	4.29	3.38
46 A 7219	0120	1500	5.05	4.29	3.38
46 A 7220	0121	2500	5.05	4.29	3.38
46 A 7221	0122	3500	5.35	4.55	3.58
46 A 7222	0123	5000	5.35	4.55	3.58
46 A 7155	4190	7500	5.55	4.72	3.72
46 A 7156	4191	10K	5.55	4.72	3.72
46 A 7158	4193	15K	6.05	5.14	4.05

Type 5007 Dial Plate. For Type E. 1¼" dia. Has black background. Shpg. wt., 1 oz.
46 A 7939. 1-4....................**Each .30**
5-9.........**Each .26** **10-24** .....**Each .20**

Type 5151 Knob. ¾" finger-grip type for Type E rheostats. Shpg. wt., 1 oz.
46 A 7940. 1-4....................**Each .30**
5-9........ **Each .26** **10-24**......**Each .20**

TANDEM COUPLING KIT FOR TYPE E

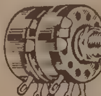
Type 6591. Consists of a steel "U" frame, mica washer, coupling, Allen wrench, instructions. Max. panel thickness ¹⁄₁₆". Frame 1⁷⁄₁₆" long, ¾" wide. 2 oz.
46 A 1595. 1-4..Ea. 2.20
6-9 Ea. 1.87 10-24 Ea. 1.48

"AB" MOLDED COMPOSITION 2-WATT POTENTIOMETERS

units are ⅝x1⁵⁄₃₂" dia.; double units x1⁵⁄₃₂" dia. Mount in ⅜" hole in panels thick. 2" long ¼" round shafts except slotted shaft and locking nut; CMU, tted shaft. CU, CCU, CMU and CLU linear taper; CA Types, CW log; CB CCW log. ±10% tolerance, except %. Av. shpg. wt., 3½ oz.

CA, CB, CU

CLU



CCU Duals

CMU

STYLE CA, CB, CU

ok	Mfr's Type	Ohms	EACH 1-9	EACH 10-49
1500	CU5001	50	1.95	1.75
1501	CU1011	100	1.95	1.75
1596	CU1511	150	1.95	1.75
1502	CU2511	250	1.95	1.75
1597	CU3511	350	1.95	1.75
1503	CU5011	500	1.95	1.75
1598	CU7511	750	1.95	1.75
1504	CU1021	1000	1.95	1.75
1599	CU1521	1500	1.95	1.75
1505	CU2521	2500	1.95	1.75
1600	CU3521	3500	1.95	1.75
1506	CU5021	5000	1.95	1.75
1601	CU7521	7500	1.95	1.75
1507	CU1031	10K	1.95	1.75
1508	CB1031	10K	2.25	2.02
1602	CU1531	15K	1.95	1.75
1509	CU2531	25K	1.95	1.75
1510	CB2531	25K	2.25	2.02
1603	CU3531	35K	1.95	1.75
1511	CU5031	50K	1.95	1.75

Stock No.	Mfr's Type	Ohms	EACH 1-9	EACH 10-49
46 A 1512	CB5031	50K	2.25	2.02
46 A 1604	CU7531	75K	1.95	1.75
46 A 1513	CU1041	100K	1.95	1.75
46 A 1514	CA1041	100K	2.25	2.02
46 A 1605	CU1541	150K	1.95	1.75
46 A 1515	CU2541	250K	1.95	1.75
46 A 1516	CA2541	250K	2.25	2.02
46 A 1606	CU3541	350K	1.95	1.75
46 A 1517	CU5041	500K	1.95	1.75
46 A 1518	CA5041	500K	2.25	2.02
46 A 1607	CU7542	750K*	1.95	1.75
46 A 1519	CU1052	1 meg*	1.95	1.75
46 A 1520	CA1052	1 meg*	2.25	2.02
46 A 1608	CU1552	1.5 meg*	1.95	1.75
46 A 1548	CU2052	2 0 meg*	1.95	1.75
46 A 1521	CU2552	2.5 meg*	1.95	1.75
46 A 1522	CA2552	2 5 meg*	2.25	2.02
46 A 1609	CU3552	3.5 meg*	1.95	1.75
46 A 1523	CU5052	5 meg*	1.95	1.75
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CLU LOCKING-SHAFT TYPES—MIL-R-94B

Stock No.	Mfr's Type	Ohms	EACH 1-9	EACH 10-49
46 A 1525	CLU5001	50	2.55	2.29
46 A 1526	CLU1011	100	2.55	2.29
46 A 1527	CLU2511	250	2.55	2.29
46 A 1528	CLU5011	500	2.55	2.29
46 A 1529	CLU1021	1000	2.55	2.29
46 A 1530	CLU2521	2500	2.55	2.29
46 A 1531	CLU5021	5000	2.55	2.29
46 A 1532	CLU1031	10K	2.55	2.29
46 A 1533	CLU2531	25K	2.55	2.29
46 A 1534	CLU5031	50K	2.55	2.29
46 A 1535	CLU1041	100K	2.55	2.29
46 A 1536	CLU2541	250K	2.55	2.29
46 A 1537	CLU5041	500K	2.55	2.29
46 A 1538	CLU1052	1 meg*	2.55	2.29
46 A 1549	CLU2052	2 meg*	2.55	2.29
46 A 1539	CLU2552	2.5 meg*	2.55	2.29
46 A 1540	CLU5052	5 meg*	2.55	2.29
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CMU SLOTTED-SHAFT TYPES—MIL-R-94B

1612	CMU5001	50	1.95	1.75
1613	CMU1011	100	1.95	1.75
1614	CMU2511	250	1.95	1.75
1615	CMU5011	500	1.95	1.75
1616	CMU1021	1000	1.95	1.75
1617	CMU2521	2500	1.95	1.75
1618	CMU5021	5000	1.95	1.75
1619	CMU1031	10K	1.95	1.75
1620	CMU2531	25K	1.95	1.75

46 A 1621	CMU5031	50K	1.95	1.75
46 A 1622	CMU1041	100K	1.95	1.75
46 A 1623	CMU2541	250K	1.95	1.75
46 A 1624	CMU5041	500K	1.95	1.75
46 A 1625	CMU1052	1 meg*	1.95	1.75
46 A 1626	CMU2052	2 meg*	1.95	1.75
46 A 1627	CMU2552	2.5 meg*	1.95	1.75
46 A 1628	CMU5052	5 meg*	1.95	1.75
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STYLE CCU DUALS

46 A 1541	CCU1031	10K	5.85	5.26
46 A 1542	CCU2531	25K	5.85	5.26
46 A 1543	CCU5031	50K	5.85	5.26
46 A 1544	CCU1041	100K	5.85	5.26
46 A 1545	CCU2541	250K	5.85	5.26
46 A 1546	CCU5041	500K	5.85	5.26
46 A 1547	CCU1052	1 meg*	5.85	5.26
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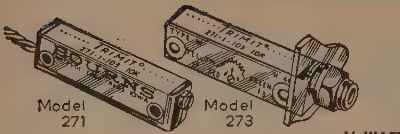
Potentiometers and Controls



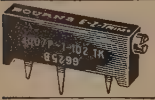
BOURNS TRIMIT® SUBMINIATURE POTENTIOMETERS

Body is only 9/32x5/16x1¼". May be stacked. Have 25-turn screwdriver adjustment, zero to full value, with self locking shaft. Power rating is at 25° C. Operating range, −55° to +105° C. Panel mtg. requires .228" hole

with max. thickness, .13". Std.
have two #2 holes on 1" ctrs. **Qu**
price for one resistance value
Specify Stock No. and resistance
ordering. Av. shpg. wt., 2 oz.

¼-WATT WIREWOUND TYPE. Size 5/16x¼x1¼".

Stock No.	Mfr's Type	Terminal Connections	Mounting	Resistance Values (Ohms) Specify Values Wanted	EACH 1-9	10-24	2
46 A 7397 C	271	Insulated leads	Standard	50, 100, 200, 500, 1000, 2000, 5000, 10K	3.19	2.95	
46 A 7981	271	Insulated leads	Standard	20K only	4.32	4.00	
46 A 7034 C	271	Insulated leads	Panel	50, 100, 200, 500, 1000, 2000, 5000, 10K	4.00	3.70	
46 A 7062	271	Insulated leads	Panel	20K only	5.13	4.75	
46 A 7398 C	273	Solder lugs	Standard	50, 100, 200, 500, 1000, 2000, 5000, 10K	3.19	2.95	
46 A 7982	273	Solder lugs	Standard	20K only	4.32	4.00	
46 A 7035 C	273	Solder lugs	Panel	50, 100, 200, 500, 1000, 2000, 5000, 10K	4.00	3.70	
46 A 7063	273	Solder lugs	Panel	20K only	5.13	4.75	
46 A 7399 C	275	PC pins	Printed circuit	50, 100, 200, 500, 1000, 2000, 5000, 10K	3.19	2.95	
46 A 7983	275	PC pins	Printed circuit	20K only	4.32	4.00	

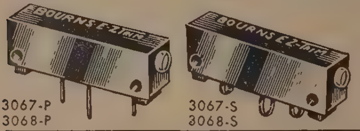


BOURNS 20-TURN MICROMINIATURE E-Z TRIM POTENTIOMETERS

Type 3007. Rugged potentiometer with high temperature sealed plastic case, usable to 125°C. Precision wirewound element. 20-turn screwdriver adjustment. Meet **MIL-R-27208B** specifications for humidity, vibration and shock.

Power rating, 1 watt at 40°C. Resolution: 1.6% to
50 to 20K. Res. tol.: ±10%. Standard PC mountin
.75x.16x.31". 2 oz. **Quantity prices in table are f**
resistance value only.

Stock No.	Mfr's Type	Values Available (Ohms)—Specify Values	1-9, EA.	10-24, EA.	25-49,
46 A 7385 C	3007P	50, 100, 200, 500, 1000, 2000, 5000, 10K, 20K	1.75	1.62	1.4

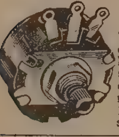


BOURNS E-Z TRIM® POTENTIOMETERS

Types 3067, 3068. Type 3067 ½-watt 15-turn and 3068 1/5-watt 15-turn potentiometers are designed specifically for commercial applications. 3068 has a Resiston® carbon resistance element. Type 3067 has a wirewound element. Has 15-turn adjust-

ment and self-locking shafts for stab
precise electrical settings. Wipers idle a
ends of travel. *Printed circuit pin. †
lugs. Mtg. ctrs. 53/64". ⅜x1x9/32". S
Mfr's Type No. and resistance
when ordering. Av. Shpg. wt., 2 oz.

Stock No.	Mfr's Type	Values Available (Ohms)—Specify Values	1-9, EA.	10-24, EA.	25-49,
46 A 7636 C	†3067-S	50, 100, 200, 500, 1000, 2000, 5000, 10K, 20K	1.85	1.71	1.5
46 A 7637 C	*3067-P	50, 100, 200, 500, 1000, 2000, 5000, 10K, 20K	1.85	1.71	1.5
46 A 7638 C	†3068-S	20K, 50K, 100K, 200K, 500K, 750K, 1 meg	1.85	1.71	1.5
46 A 7639 C	*3068-P	20K, 50K, 100K, 200K, 500K, 750K, 1 meg	1.85	1.71	1.5

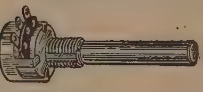


MALLORY 3-WATT TV CONTROLS

Three-watt wirewound potentiometers designed especially for replacement of television controls. Also excellent for use as voltage dividers and bias controls. Insulated contact arm type, linear taper. Special dual contactor mechanism. 900 volts AC insulation between resistance element and chassis. 297° rotation. Size, 1 25/64" in diameter. Knurled stub shaft has screwdriver slot. ⅜" bushing. Shpg. wt., 4 oz.

Stock No.	Type	Ohms	EACH	Stock No.	Type	Ohms	EACH
46 A 3835	R20L	20	.93	46 A 3843	R1500L	1500	.93
46 A 3837	R25L	25	.93	46 A 3844	R2500L	2500	.93
46 A 3840	R50L	50	.93	46 A 3846	R3000L	3000	.93
46 A 3864	R100L	100	.93	46 A 3845	R5000L	5000	.93
46 A 3841	R250L	250	.93	46 A 3693	R10ML	10K	1.08
46 A 3834	R500L	500	.93	46 A 3695	R20ML	20K	1.08
46 A 3842	R1000L	1000	.93	....	....	......	......

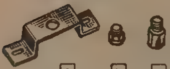
MALLORY TYPE VW WIREWOUND 5-WATT CONTROLS



Miniature type. Case size ¾" in diameter by ⅞" in depth. Bushing: ⅜x⅜" diameter and length. Has ¼" plain round shaft, 2½" long from mounting surface. Linear taper. Tolerance ±5%. 305° mechanical rotation; 275° electrical rotation. Av. wt., 4 oz.

Stock No.	Type	Ohms	EA.	Stock No.	Type	Ohms	EA.
46 A 1087	VW-1	1	1.38	46 A 1104	VW-250	250	1.38
46 A 1088	VW-2	2	1.38	46 A 1105	VW-300	300	1.38
46 A 1089	VW-3	3	1.38	46 A 1106	VW-400	400	1.38
46 A 1090	VW-5	5	1.38	46 A 1107	VW-500	500	1.38
46 A 1092	VW-8	8	1.38	46 A 1110	VW-1K	1000	1.38
46 A 1093	VW-10	10	1.38	46 A 1111	VW-1P5K	1500	1.44
46 A 1094	VW-15	15	1.38	46 A 1112	VW-2K	2000	1.44
46 A 1095	VW-20	20	1.38	46 A 1113	VW-2P5K	2500	1.44
46 A 1096	VW-25	25	1.38	46 A 1114	VW-3K	3000	1.44
46 A 1097	VW-30	30	1.38	46 A 1115	VW-4K	4000	1.44
46 A 1098	VW-40	40	1.38	46 A 1116	VW-5K	5000	1.44
46 A 1099	VW-50	50	1.38	46 A 1118	VW-10K	10K	1.50
46 A 1100	VW-60	60	1.38	46 A 1119	VW-15K	15K	1.56
46 A 1102	VW-100	100	1.38	46 A 1120	VW-20K	20K	1.56
46 A 1103	VW-200	200	1.38	46 A 1121	VW-25K	25K	1.65

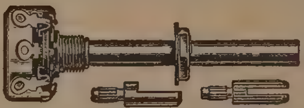
MALLORY CONTROL MOUNTING ACCESSORIES



Useful accessories for Mallory controls include mounting brackets with adjustable mounting centers, in two sizes; extender that extends body of controls ⅝" away from mounting surface; and bushing adapter for mounting in panels up to ¼" thick. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Fig.	Description	EACH
46 A 3676	RB249	A	Mtg. bracket. mtg. ctrs. 2½"	.05
46 A 3675	RB248	A	Mtg. bracket. mtg. ctrs. 1¾"	.05
46 A 3661	EB247	C	Extender	.13
47 A 4092	119	B	¼" bushing (**Pkg. of 5**)	.75

MALLORY SERIES U MIDGETROL CONTROLS



For audio, tone c
circuits in home rec
amplifiers, portable
sets and industrial
ment. Available in
line of resistances,
and taps. Round,
shaft—easily cut
sired length. Two
shank knob adapte
nished with each Midgetrol. With nut and lock washer. 15/16" dia.
shaft, 2⅛" long, ¼" dia. Less switch. Shpg. wt., 3 oz.

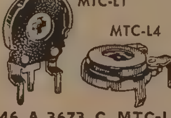
Stock No.	Mfr's Type	Ohms	Taper*	Stock No.	Mfr's Type	Ohms	T
46 A 3714	U-1	100	4	46 A 3763	U-35	50K	
46 A 3709	U-2	500	4	46 A 3765	U-39	100K	
46 A 3785	U-4	1K	4	46 A 3767	U-41	100K	
46 A 3787	U-8	3K	4	46 A 3768	U-42	150K	
46 A 3751	U-12	5K	1	46 A 3770	U-44	250K	
46 A 3752	U-14	5K	4	46 A 3772	U-46	250K	
46 A 3753	U-18	10K	1	46 A 3773	U-48	500K	
46 A 3755	U-20	10K	4	46 A 3774	U-50	500K	
46 A 3756	U-21	15K	1	46 A 3776	U-53	1 Meg	
46 A 3783	U-26	20K	4	46 A 3777	U-54	1 Meg	
46 A 3712	U-28A	25K	1	46 A 3781	U-56	2 Meg	
46 A 3760	U-29	25K	4	46 A 3789	U-82	10 Meg	
46 A 3761	U-33	50K	1	....	......	......	

EACH..

EXPLANATION OF TAPERS*

Taper No. 1: Nonlinear. For audio or antenna shunt circuits.
Tper No. 4a: Linear. For voltage control.

MALLORY MTC MINIATURE TRIMMER CONTROL



Subminiature potentiometers only
diameter. Designed especially for p
circuitry. Also meets need for low wa
carbon-type variable resistance s
Screwdriver slot adjustable. Rated
watt. Linear taper. Uses include bia
trols where initial setting is usuall
manent except for servicing. 270° rot
180° with fixed end resistance. Wt.,

46 A 3673 C. MTC-L1 for Vertical PC Mounting. Termin
arranged for stand-up mounting on PC circuitry. Available in resi
values listed in table, below. *Specify values from Table "A."*... **Eac**

46 A 3674 C. MTC-L4 for Horizontal PC Mounting. Ter
arranged so that control can be mounted flat. Resistance values
in table, below. *Specify values from Table "A."*............. **Eac**

TABLE "A"—VALUES AVAILABLE FROM STOCK

STANDARD RESISTANCE VALUES—SPECIFY VALUES WANTE								
Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
100	300	1000	3000	6800	20K	100K	250K	500K
200	500	1500	5000	10K	25K	120K	325K	......
250	750	2000	6000	15K	50K	180K	450K	......

IRC Controls and Trimmers

EXPLANATION OF TAPERS

er A. Linear curve for uniform resistance change.
er C. Left-hand logarithmic taper for audio circuit control.

ı carbon base element and "two-finger" arm. Special-purpose controls can be p by using a Type PQ, RQ or RQL with M multisections and a Type 76 switch below). Types PQ, RQ and RQL have readed bushing. Body diameter in- terminals is 1⅝" maximum; depth panel, 33⁄64". Each Type M multisection ⁄32" to the depth. PQ types have shaft 3" ⁄4" diameter. RQ and RQL types have aft with screwdriver slot; shaft extends ond threaded bushing. Types RQ and re identical except RQL has split bush- locking nut—for permanent, vibration- ettings. Tolerance of all types is ±10%. terminals. Type PQ, RQ, RQL and M s feature 300 degree arc of rotation—r without switch. Power rating is ½ 500 volt maximum. Ground plate on PQ, RQ, and RQL has 2 locating tabs ay be bent down out of the way, if not . Av. shpg. wt., 4 oz.

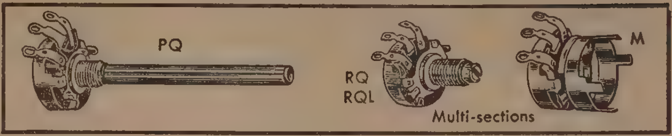
76 ATTACHABLE SWITCHES FOR RQ, RQL, M AND Q CONTROLS

attached to controls listed at left by g down four metal tabs. Switch housings resistant material. Terminals hydrau- staked—no openings for solder to run itch. Silver-plated alloy contacts.

6-4 is make-one, break-one type for spot-killing. Type 76-1 handles up to s @ 125 V; Type 76-2 is rated 1 amp V. Shpg. wt., 2 oz.

359. **Type 76-1.** SPST.... **Each .75**
591. **Type 76-2.** DPST. ... **Each .75**
888. **Type 76-4.** SPDT.. ..**Each .75**

IRC SERIES PQ, RQ, RQL AND M CONTROLS



Mfr's Type	Ohms	Taper	Stock No. PQ	Stock No. RQ	Stock No. RQL	Stock No. M
11-103	500	A	46 A 5510	46 A 5542	46 A 3271	46 A 5592
11-108	1000	A	46 A 5511	46 A 5543	46 A 3272	46 A 5574
11-110	2000	A	46 A 5512	46 A 5544	46 A 3273	46 A 5593
11-112	3000	A	46 A 5513	46 A 5545		
11-114	5000	A	46 A 5514	46 A 5546	46 A 3275	46 A 5575
11-115	7500	A	46 A 5515			
11-116	10K	A	46 A 5516	46 A 5548	46 A 3276	46 A 5576
13-116	10K	C	46 A 5517			
11-119	20K	A	46 A 5519		46 A 3277	
11-120	25K	A	46 A 5520		46 A 3278	46 A 5577
11-123	50K	A	46 A 5523	46 A 5555	46 A 3280	46 A 5578
13-123	50K	C	46 A 5524			
11-128	100K	A	46 A 5526	46 A 5558	46 A 3282	46 A 5579
13-128	100K	C	46 A 5527			46 A 5580
11-129	200K	A			46 A 3283	
11-130	250K	A	46 A 5528	46 A 5560	46 A 3284	46 A 5581
13-130	250K	C	46 A 5529			
11-133	500K	A	46 A 5530	46 A 5562	46 A 3286	46 A 5583
13-133	500K	C	46 A 5531	46 A 5563	46 A 3287	46 A 5584
11-137	1.0 meg	A	46 A 5532	46 A 5564	46 A 3288	46 A 5585
13-137	1.0 meg	C	46 A 5533		46 A 3289	
11-139	2.0 meg	A	46 A 5535		46 A 3291	
11-140	3.0 meg	A	46 A 5538	46 A 5570		
13-140	3.0 meg	C	46 A 5539			46 A 5594
11-141	5.0 meg	A	46 A 5540	46 A 5572		
11-143	10.0 meg	A	46 A 5541	46 A 5573		46 A 5590

PQ and RQ Controls..**Each 1.71**
M Multisections..**Each 1.62**
RQL Controls..**Each 1.77**

TYPE WPRL CONTROLS

Locking-type controls with screw-driver slot shaft, ¼" dia. and approximately ½" long from mounting face. With ⅜" locking-type bushing and locking nut. Linear taper. **Specify Type and Ohms.** Shpg. wt., 4 oz.

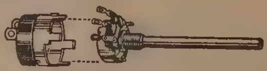
	Ohms	Ohms	Ohms	Ohms
	25	250	2000	7500
	30	400	2500	10K
	50	500	3000	
	100	750	4000	
	200	1000	5000	
859 C				**Each 1.77**
	20K	25K		
889 C				**Each 2.19**
	50K			
890 C				**Each 2.43**

TCHES FOR WRPL CONTROLS

.218. **Type 76-11.** SPST, 2 oz.......75
.219. **Type 76-12.** DPST, 2 oz.......75

IRC-CTS Q CONTROLS WITH UNIVERSAL SHAFTS

Knurled, flatted and slotted. 3" universal shaft can be cut to desired length. 15⁄16" body dia. ⅜" bushing, ¼" long. Brass, tinned terminals for easy soldering. To gang, use M multisections, above. Less switches. For switches and explanations of taper see above. Av. shpg. wt., 4 oz.

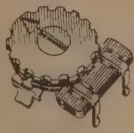


Stock No.	Mfr's Type	Ohms	Taper
46 A 5395	Q11 201	250	A
46 A 5300	Q11-103	500	A
46 A 5301	Q11-108	1000	A
46 A 5442	Q11-109	1500	A
46 A 5302	Q11-110	2000	A
46 A 5373	Q13-111	2500	C
46 A 5303	Q11-112	3000	A
46 A 5304	Q11 114	5000	A
46 A 5383	Q13-114	5000	C
46 A 5306	Q11-116	10K	A
46 A 5309	Q11-119	20K	A
46 A 5311	Q11-120	25K	A
46 A 5443	Q13-120	25K	C
46 A 5314	Q11-123	50K	A
46 A 5315	Q13-123	50K	C
46 A 5317	Q11-128	100K	A
46 A 5318	Q13-128	100K	C
46 A 5374	Q11-129	200K	A
46 A 5319	Q11-130	250K	A
46 A 5320	Q13-130	250K	C
46 A 5322	Q11-133	500K	A
46 A 5323	Q13-133	500K	C
46 A 5325	Q11-137	1 meg	A
46 A 5326	Q13-137	1 meg	C
46 A 5328	Q11-138	1.5 meg	A
46 A 5329	Q11-139	2 meg	A
46 A 5330	Q13-139	2 meg	C
46 A 5331	Q11-239	2.5 meg	A
46 A 5332	Q11-140	3 meg	A
46 A 5334	Q11-141	5 meg	A
46 A 5335	Q11-143	10 meg	A

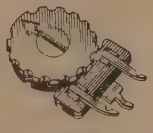
EACH **1.23**

U-201 AND X-201 CARBON TRIMMERS

- imited space use
- Easy-to-install



U-201



X-201

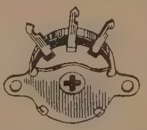
ure ¼-watt carbon rs for limited-space ation. Ideal for d circuit boards an occasionally ad- variable resistance red. PC type termi- asy-to-install, snap- supporting bracket . U-201 mounts with adjusting knob parallel to PC board; X- th knob perpendicular to board. Blue nylon knurled knob, a.; slotted for easy front and rear adjustment. Linear taper; ±5% rotation; max. voltage 500 VDC; ±20% tolerance.

ock o.	Type U-201	Ohms	Stock No.	Type X-201	Ohms
1802	R501B	500			
1803	R102B	1000	46 A 1816	R102B	1000
			46 A 1817	R252B	2500
1805	R502B	5000	46 A 1818	R502B	5000
1806	R103B	10K			
1807	R253B	25K	46 A 1820	R253B	25K
1808	R503B	50K	46 A 1821	R503B	50K
			46 A 1823	R254B	250K

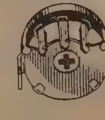
Ea. .39 25-49..Ea. .35 50-99..Ea... .33 100-299 Ea. .29

117 AND P-115 WIREWOUND TRIMMERS

- Fully enclosed case
- Simple to mount



117



P-115

Miniature trimmers, enclosed to protect resistance unit and adjustable arm for longer life. Silent operation; minimum power loss. Insulated rotor isolates tuning device from shock, prevents external interference or damage to circuit during adjustment. Cross-slot in nylon rotor with adjustment. P-115 is twist-tab mounted; 117 is rivet-ear mounted. Printed circuit type terminals. Linear taper. ±10% tolerance. Rated 2 watts. 260° ±5% rotation. Maximum voltage 500 VDC.

Stock No.	Type 117	Ohms	Stock No.	Type P-115	Ohms
46 A 1826	R5R0A	5	46 A 1837	R5R0A	5
46 A 1829	R500A	50	46 A 1840	R500A	50
46 A 1830	R101A	100	46 A 1841	R101A	100
46 A 1831	R251A	250	46 A 1842	R251A	250
46 A 1832	R501A	500	46 A 1843	R501A	500
46 A 1833	R102A	1000	46 A 1844	R102A	1000
46 A 1835	R502A	5000	46 A 1846	R502A	5000

1-24..Ea. 1.25 25-49..Ea. 1.00 50-99..Ea. .75 100-Up..Ea. .60

Sprague Electrolytic Capacitors

TYPE TE (30D) "LITTL-LYTIC" SUBMINIATURE CAPACITORS

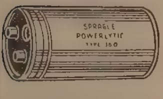
Ultra-small electrolytics at reasonable prices. Excellent for use in transistor radios, transistor circuits in hearing aids, pocket tape recorders, wireless microphones, and other miniature electronic equipment. Hermetically sealed, aluminum-enclosed for complete reliability.

All-welded construction—no pressure joints to cause open or in
mittent circuits. Will not corrode. Extremely low leakage cur
and long shelf life. Withstand temperatures up to 85° C. Furnis
with clear plastic insulating sleeves. Size given in table belo
diameter x length. Av. shpg. wt., 2 oz.

IMPORTANT. Where capacitance is found in 2 or more voltage ratings with nearly same case size and price, normally only the higher voltage unit is listed. A higher voltage rating can be sub
stituted for one of lower value provided µF rating remains equ

Stock No.	Type TE-	µF	WV DC	Size Dia. x L	EA.
43 A 1739	1052.2	5	3	17/64x35/64"	.48
43 A 1742	1053	10	3	17/64x35/64"	.48
43 A 6028	1055	25	3	17/64x35/64"	.48
43 A 1747	1058	50	3	17/64x47/64"	.48
43 A 1749	1059.5	100	3	21/64x47/64"	.54
43 A 1003	1061	150	3	21/64x55/64"	.66
43 A 6654	1064	200	3	21/64x55/64"	.66
43 A 1004	1065	250	3	25/64x55/64"	.69
43 A 6658	1068	500	3	25/64x1 19/64"	.75
43 A 6034	1084	5	6	17/64x35/64"	.48
43 A 1750	1085	6	6	17/64x35/64"	.48
43 A 6035	1086	8	6	17/64x35/64"	.48
43 A 6036	1087	10	6	17/64x35/64"	.48
43 A 6037	1089	15	6	17/64x35/64"	.48
43 A 1751	1090	20	6	17/64x35/64"	.48
43 A 6038	1091	25	6	17/64x47/64"	.48
43 A 1752	1093	35	6	17/64x47/64"	.48
43 A 1006	1095	40	6	17/64x47/64"	.48
43 A 6659	1101.5	75	6	21/64x47/64"	.54
43 A 1753	1102	100	6	21/64x55/64	.66
43 A 1754	1103	150	6	25/64x55/64	.69
43 A 1007	1104	200	6	25/64x55/64"	.69
43 A 1008	1105	250	6	25/64x63/64"	.72
43 A 6661	1106	300	6	25/64x1 19/64"	.72
43 A 6044	1127	5	12	17/64x35/64"	.48
43 A 6045	1128	10	12	17/64x35/64"	.48
43 A 1763	1129	15	12	17/64x35/64"	.48
43 A 1013	1130	20	12	17/64x47/64"	.48
43 A 1765	1131	25	12	17/64x47/64"	.48
43 A 1767	1133	50	12	21/64x47/64"	.54
43 A 1768	1134	75	12	21/64x55/64"	.66
43 A 1769	1135	100	12	21/64x55/64"	.69
43 A 1771	1137	200	12	25/64x1 19/64"	.75
43 A 1772	1138	250	12	25/64x1 19/64"	.75
43 A 6624	1152	5	15	17/64x35/64"	.48
43 A 1777	1153	6	15	17/64x35/64"	.48
43 A 1018	1154	8	15	17/64x35/64"	.48
43 A 6625	1155	10	15	17/64x35/64"	.48
43 A 6626	1156	15	15	17/64x47/64"	.48
43 A 1019	1157	20	15	17/64x47/64"	.48
43 A 6628	1157.1	25	15	17/64x47/64"	.48
43 A 6629	1158	30	15	21/64x47/64"	.54
43 A 6630	1159	35	15	21/64x47/64"	.54
43 A 6631	1160	50	15	21/64x47/64"	.54
43 A 1020	1161	75	15	21/64x55/64"	.66
43 A 6633	1162	100	15	25/64x55/64"	.69
43 A 6634	1163	150	15	25/64x63/64"	.72
43 A 6635	1164	200	15	25/64x1 19/64"	.75
43 A 1779	1200	1	25	17/64x35/64"	.48
43 A 1780	1201	2	25	17/64x35/64"	.48
43 A 1021	1201.1	3	25	17/64x35/64"	.48
43 A 1022	1201.2	4	25	17/64x35/64"	.48
43 A 6046	1202	5	25	17/64x35/64"	.48
43 A 6047	1203	6	25	17/64x35/64"	.48
43 A 1023	1203.5	8	25	17/64x35/64"	.48
43 A 6048	1204	10	25	17/64x47/64"	.48
43 A 6049	1205	15	25	17/64x47/64"	.48
43 A 6637	1207	25	25	21/64x47/64"	.54
43 A 6638	1208	35	25	21/64x47/64"	.54
43 A 6639	1209	50	25	21/64x55/64"	.66
43 A 1024	1210	75	25	25/64x55/64"	.69
43 A 6641	1211	100	25	25/64x63/64"	.72
43 A 1784	1300	1	50	17/64x35/64"	
43 A 6642	1301	2	50	17/64x35/64"	
43 A 1785	1302	3	50	17/64x35/64"	
43 A 6643	1302.1	4	50	17/64x35/64"	
43 A 1786	1303	5	50	17/64x47/64"	
43 A 1025	1303.1	6	50	17/64x47/64"	
43 A 1788	1303.3	8	50	17/64x47/64"	
43 A 1789	1304	10	50	21/64x47/64"	
43 A 1790	1304.2	15	50	21/64x47/64"	
43 A 6644	1305	20	50	21/64x55/64"	
43 A 6662	1306	35	50	25/64x55/64"	
43 A 6645	1307	50	50	25/64x63/64"	
43 A 1026	1400	1	100	17/64x35/64"	
43 A 1792	1401	2	100	17/64x47/64"	
43 A 1794	1403	4	100	21/64x47/64"	
43 A 6646	1404	5	100	21/64x55/64"	
43 A 1795	1405	6	100	21/64x55/64"	
43 A 6647	1407	10	100	25/64x55/64"	
43 A 1028	1408	15	100	25/64x63/64"	
43 A 6649	1409	20	100	25/64x1 19/64"	
43 A 1797	1500	1	150	17/64x35/64"	
43 A 1798	1501	2	150	17/64x47/64"	
43 A 1029	1502	3	150	21/64x47/64"	
43 A 1799	1503	4	150	21/64x55/64"	
43 A 6651	1504	5	150	21/64x55/64"	
43 A 1800	1505	6	150	25/64x55/64"	
43 A 1801	1506	8	150	25/64x55/64"	
43 A 6652	1507	10	150	25/64x63/64"	

TYPE 36D "POWERLYTIC" ELECTROLYTICS



Computer quality. Low effective series resistance, leakage currents. Extremely long life. Withstand MIL conditions including -55°C to +85°C storage. Aluminum can in molded cover. 9/32" term tapped for 10-32 screws. Temp., -20° to +85°C. Tol., 3 to 50 WVDC, 10%, +75%; 51 to 450 WVDC, -10%, +50%. 1½ lbs.

*CAPACITOR SIZE CHART

*	Dia. x Lgth.	*	Dia. x Lgth.
A	1 7/16x2½"	E	2 1/16x4½"
B	1 7/16x3½"	F	2 9/16x4½"
C	1 7/16x4½"	G	3 1/16x4½"
D	2 7/16x3½"		

Stock No.	Type 36D . . 2A	µF	WV DC	*	EACH
43 A 5023	602G010AA	6000	10	A	2.31
43 A 5025	123G010AB	12000	10	B	2.79
43 A 5032	462G015AA	4600	15	A	2.31
43 A 5156	922G015AB	9200	15	B	2.79
43 A 5154	133G015AC	13000	15	C	3.22
43 A 5035	213G015BB	21000	15	D	4.31
43 A 5041	272G025AA	2700	25	A	2.31
43 A 5042	552G025AB	5500	25	B	2.80
43 A 5050	822G025AC	8200	25	C	3.23
43 A 5051	183G025BC	18000	25	F	5.22
43 A 5058	552G040AC	5500	40	C	3.25
43 A 5059	842G040BB	8400	40	D	4.37
43 A 5063	132G050AA	1300	50	A	2.32
43 A 5064	262G050AB	2600	50	B	2.32
43 A 5065	392G050AC	3900	50	C	3.26
43 A 5066	602G050BB	6000	50	D	4.39
43 A 5067	902G050BC	9000	50	E	5.34
43 A 5068	153G050CC	15000	50	F	7.80
43 A 5069	223G050DC	22000	50	G	10.12
43 A 5085	252F075AC	2500	75	C	3.27
43 A 5086	392F075BB	3900	75	D	4.41
43 A 5087	592F075BC	5900	75	E	5.34
43 A 5091	451F100AA	450	100	A	2.32
43 A 5097	132F100AC	1300	100	C	3.25
43 A 5099	302F100BC	3000	100	E	5.30
43 A 5100	532F100CC	5300	100	F	
43 A 5102	301F150AA	300	150	A	
43 A 5103	901F150AC	900	150	C	
43 A 5104	142F150BB	1400	150	D	
43 A 5105	212F150BC	2100	150	E	
43 A 5107	532F150DC	5300	150	G	
43 A 5109	251F200AA	250	200	A	
43 A 5110	431F200AB	430	200	B	
43 A 5111	641F200AC	640	200	C	
43 A 5112	142F200BC	1400	200	E	
43 A 5116	531F250AC	530	250	C	
43 A 5130	122F250BC	1200	250	E	
43 A 5131	302F250DC	3000	250	G	
43 A 5133	241F300AB	240	300	B	
43 A 5134	821F300BC	820	300	E	
43 A 5136	950F350AA	95	350	A	
43 A 5137	191F350AB	190	350	B	
43 A 5138	421F350BB	420	350	D	
43 A 5144	500F450AA	50	450	A	
43 A 5150	141F450AC	140	450	C	
43 A 5151	221F450BB	220	450	D	
43 A 5152	331F450BC	330	450	E	

TYPE 39D "POWERLYTIC" ELECTROLYTICS

Low series resistance, leakage current. Temp., -20°C to +85°C. Tol., 3 to 50 WVDC, -10%, +75%; 150 to 450 WVDC, -10%, +50%. 2½" leads. Av. shpg. wt., 4 oz.

*CAPACITOR SIZE CHART

*	Dia. x Lgth.	*	Dia. x Lgth.
A	9/16x1¼"	K	15/16x1¼"
B	9/16x1¾"	L	15/16x2¼"
C	9/16x2¼"	M	15/16x2¾"
D	11/16x1¾"	N	15/16x3¼"
E	11/16x2¼"	O	1 1/16x1¼"
F	11/16x2¾"	P	1 1/16x2¼"
G	13/16x1¼"	Q	1 1/16x2¾"
H	13/16x1¾"	R	1 1/16x3¼"
I	13/16x2¼"	S	1 1/16x3¾"
J	13/16x2¾"		

Stock No.	Type 39D	µF	WV DC	*	EA.
43 A 6484	138G003EL4	1300	3	C	1.67
43 A 6485	218G003HE4	2100	3	K	1.74
43 A 6487	578G003GP4	5700	3	J	2.01
43 A 6488	109G003HS4	10000	3	N	2.52
43 A 6490	607G006EJ4	600	6	B	1.62
43 A 6491	108G006GE4	1000	6	G	1.68
43 A 6492	208G006GJ4	2000	6	H	1.79
43 A 6493	408G006GP4	4000	6	J	2.01
43 A 6495	109G006JS4	10000	6	R	2.91
43 A 6496	507G010EJ4	500	10	B	1.62
43 A 6497	108G010FJ4	1000	10	D	1.71
43 A 6498	168G010FL4	1600	10	E	1.77
43 A 6499	258G010GL4	2500	10	I	1.95
43 A 6504	607G015EL4	600	15	C	1.67
43 A 6505	128G015FL4	1200	15	E	1.77
43 A 6507	258G015GP4	2500	15	J	2.01
43 A 6509	408G015JL4	4000	15	P	2.43
43 A 6511	207F025EJ4	200	25	B	1.62
43 A 6512	507G025HE4	500	25	K	1.74
43 A 6513	108G025GL4	1000	25	I	1.95
43 A 6514	228G025HP4	2200	25	M	2.07
43 A 6515	408G025JT4	4000	25	S	3.15
43 A 6516	756G030EE4	75	30	A	1.59
43 A 6517	157G030EJ4	150	30	B	1.62
43 A 6518	257G030EL4	250	30	C	1.67
43 A 6519	507G030FL4	500	30	E	1.77
43 A 6523	118G030GP4	1100	30	J	2.01
43 A 6524	218G030HS4	2100	30	N	2.52
43 A 6528	107G050EJ4	100	50	B	
43 A 6529	157G050EL4	150	50	C	
43 A 6531	257G050HE4	250	50	K	
43 A 6533	507G050GL4	500	50	I	
43 A 6534	118G050HP4	1100	50	M	
43 A 6537	238G050JT4	2300	50	S	
43 A 6538	256F150EJ4	25	150	B	
43 A 6539	506F150FJ4	50	150	D	
43 A 6540	107F150FP4	100	150	F	
43 A 6541	257F150HP4	250	150	M	
43 A 6543	206F250EL4	20	250	C	
43 A 6544	506F250JE4	50	250	O	
43 A 6545	107F250HL4	100	250	L	
43 A 6547	207F250JP4	200	250	Q	
43 A 6549	206F350FL4	20	350	E	
43 A 6550	306F350FP4	30	350	F	
43 A 6551	406F350GL4	40	350	I	
43 A 6553	506F350GP4	50	350	J	
43 A 6554	107F350HS4	100	350	N	
43 A 6556	505F450EL4	5	450	C	
43 A 6558	106F450FL4	10	450	E	
43 A 6561	206F450GL4	20	450	I	
43 A 6563	506F450JP4	50	450	Q	

Sprague Capacitors and Assortments

RANGE DROP" CAPACITORS YLAR"-PAPER

pact dual dielec-
'Orange Drops''
ine best features of Mylar and special
itor tissue. Rock-hard case with space-
g radial leads. Double-dipped in
ge epoxy resin for protection from ex-
ve heat and humidity. Outer foil leads
ified by black striping. Temperature
, —40°C to +80°C; can operate to
with proper voltage derating. Toler-
±10%. Shpg. wt., 2 oz.

TYPE 225P RECTANGULAR

height by thickness. 45/64" long, except †1 3/16".

ock o.	Mfr's Type	μF	WV DC	Size Inches	EA.
3570	1549R75	.15*	75	5/8x25/64	.24
3571	2249R75	.22*	75	43/64x27/64	.30
3572	3349R75	.33*	75	27/32x31/64	.54
3573	4749R75	.47*	75	27/32x19/32	.63
3574	6849R75	.68†	75	29/32x19/32	.69
3575	1059R75	1.0†	75	63/64x47/64	.69
3576	10291	.001	100	5/16x13/64	.15
3577	15291	.0015	100	5/16x13/64	.15
3578	22291	.0022	100	5/16x13/64	.15
3579	33291	.0033	100	5/16x13/64	.15
3580	47291	.0047	100	5/16x13/64	.15
3581	68291	.0068	100	5/16x13/64	.15
3582	10391	.01	100	5/16x13/64	.15
3630	15391	.015	100	5/16x13/64	.15
3600	22391	.022	100	5/16x13/64	.15
3601	33391	.033	100	21/64x15/64	.15
3603	39391	.039	100	11/32x1/4	.18
3605	47391	.047	100	11/32x1/4	.18
3608	56391	.056	100	3/8x9/32	.18
3609	68391	.068	100	3/8x9/32	.18
3611	82391	.082	100	17/32x21/64	.18
3618	10491	.1	100	17/32x21/64	.18

TYPE 220P TUBULAR

3017	2PS-S20	.02	200	3/8x7/8	.18
3018	2PS-S47	.047	200	29/64x7/8	.18
3019	2PS-S50	.05	200	15/32x7/8	.18
3020	2PS-P10	.1	200	31/64x1 3/16	.21
3138	2PS-P20	.2	200	19/32x1 5/16	.30
3021	2PS-P25	.25	200	5/8x1 5/16	.30
7917	2PS-P33	.33	200	5/8x1 5/8	.39
7912	2PS-P47	.47	200	45/64x1 5/8	.45
3022	2PS-P50	.5	200	23/32x1 5/8	.48
3023	4PS-S10	.01	400	13/32x11/16	.15
3024	4PS-S20	.02	400	13/32x7/8	.18
3026	4PS-S47	.047	400	29/64x1 3/16	.21
3027	4PS-S50	.05	400	29/64x1 3/16	.21
7911	4PS-S68	.068	400	33/64x1 3/16	.21
3028	4PS-P10	.1	400	37/64x1 3/16	.24
3029	4PS-P20	.2	400	19/32x1 5/8	.36
3030	4PS-P22	.22	400	39/64x1 5/8	.36
3031	4PS-P25	,25	400	41/64x1 5/8	.36
3032	6PS-D10	.001	600	21/64x11/16	.15
3033	6PS-D15	.0015	600	21/64x11/16	.15
3034	6PS-D20	.002	600	21/64x11/16	.15
7926	6PS-D25	.0025	600	21/64x11/16	.15
7914	6PS-D33	.0033	600	23/64x11/16	.15
7928	6PS-D39	.0039	600	3/8x11/16	.15
3043	6PS-D47	.0047	600	25/64x11/16	.15
3049	6PS-D50	.005	600	25/64x11/16	.15
7929	6PS-D56	.0056	600	25/64x11/16	.15
3051	6PS-D68	.0068	600	13/32x11/16	.15
7930	6PS-D82	.0082	600	3/8x7/8	.15
3052	6PS-S10	.01	600	25/64x7/8	.15
3053	6PS-S15	.015	600	27/64x7/8	.18
3054	6PS-S20	.02	600	31/64x7/8	.18
3055	6PS-S22	.022	600	31/64x7/8	.18
7901	6PS-S25	.025	600	17/32x7/8	.18
7935	6PS-S33	.033	600	15/32x1 3/16	.18
7936	6PS-S39	.039	600	31/64x1 3/16	.21
3058	6PS-S47	.047	600	17/32x1 3/16	.21
3059	6PS-S50	.05	600	17/32x1 3/16	.21
7904	6PS-S56	.056	600	35/64x1 3/16	.21
7905	6PS-S68	.068	600	37/64x1 3/16	.27
3143	6PS-S82	.082	600	37/64x1 5/16	.27
3060	6PS-P10	.1	600	5/8x1 5/16	.27
7913	6PS-P15	.15	600	43/64x1 5/8	.36
3061	6PS-P20	.2	600	3/4x1 5/8	.45
7908	6PS-P22	.22	600	25/32x1 5/8	.45
3062	6PS-P25	.25	600	13/16x1 5/8	.48
3063	10PS-D10	.001	1000	21/64x11/16	.15
3067	10PS-D50	.005	1000	13/32x7/8	.18

"BLACK BEAUTY" "MYLAR" PAPER TELECAPS

Molded tubular capacitors built for long life under high humidity and temperature operating conditions. Dual dielectric combines best features of polyester film and paper. Solid impregnant construction for rock-hard durability. Leakproof. Non flammable, crackproof case. 200 to 1600 WV types operate to 105° C without derating; 6000 volt up, to 85° C. 6000 WV types are oil impregnated. ±10% tolerance. Wt., 3 oz.

Stock No.	Mfr's Type	μF	WV DC	Size Dia.xL.	EA.
43 A 5119	2TM-S10	.01	200	5/16x1"	.21
43 A 5120	2TM-S20	.02	200	3/8x1 1/4"	.24
43 A 5149	2TM-S47	.047	200	7/16x1 1/4"	.24
43 A 5121	2TM-S50	.05	200	7/16x1 1/4"	.24
43 A 5122	2TM-P10	.1	200	1/2x1 1/2"	.24
43 A 5145	2TM-P15	.15	200	1/2x1 1/2"	.30
43 A 5146	2TM-P22	.22	200	5/8x1 7/8"	.48
43 A 5147	2TM-P25	.25	200	5/8x1 7/8"	.48
43 A 5148	2TM-P47	.47	200	3/4x2 1/4"	.48
43 A 5123	2TM-P50	.5	200	3/4x2 1/4"	.48
43 A 5124	2TM-M1	1.0	200	3/4x2 1/4"	.84
43 A 5118	4TM-D10	.001	400	5/16x1"	.21
43 A 5117	4TM-D50	.005	400	5/16x1"	.21
43 A 5125	4TM-S10	.01	400	3/8x1 1/4"	.21
43 A 5001	4TM-S15	.015	400	3/8x1 1/4"	.24
43 A 5126	4TM-S20	.02	400	3/4x1 1/4"	.24
43 A 5002	4TM-S25	.025	400	7/16x1 1/4"	.24
43 A 5014	4TM-S47	.047	400	7/16x1 1/4"	.24
43 A 5127	4TM-S50	.05	400	7/16x1 1/4"	.30
43 A 5128	4TM-P10	.1	400	1/2x1 1/2"	.30
43 A 5011	4TM-P15	.15	400	5/8x1 7/8"	.48
43 A 5521	4TM-P20	.2	400	5/8x1 7/8"	.48
43 A 5012	4TM-P22	.22	400	5/8x1 7/8"	.48
43 A 5129	4TM-P25	.25	400	3/4x2 1/4"	.84
43 A 5005	4TM-P47	.47	400	3/4x2 1/4"	.84
43 A 5010	4TM-P50	.5	400	3/4x2 1/4"	.84
43 A 5009	4TM-M1	1.0	400	1x2 1/2"	1.08
43 A 6250	6TM-T10	.0001	600	5/16x1"	.27
43 A 6251	6TM-T25	.00025	600	5/16x1"	.27
43 A 6253	6TM-T50	.0005	600	5/16x1"	.27
43 A 5070	6TM-D10	.001	600	5/16x1"	.21
43 A 5084	6TM-D15	.0015	600	5/16x1"	.21
43 A 5071	6TM-D20	.002	600	5/16x1"	.21
43 A 5095	6TM-D25	.0025	600	5/16x1"	.21
43 A 5072	6TM-D30	.003	600	5/16x1"	.21
43 A 5073	6TM-D40	.004	600	3/8x1 1/4"	.24
43 A 5093	6TM-D47	.0047	600	3/8x1 1/4"	.24
43 A 5074	6TM-D50	.005	600	3/8x1 1/4"	.24
43 A 6254	6TM-D68	.0068	600	3/8x1 1/4"	.24
43 A 5076	6TM-S10	.01	600	3/8x1 1/4"	.24
43 A 5094	6TM-S15	.015	600	3/8x1 1/4"	.24
43 A 5077	6TM-S20	.02	600	7/16x1 1/4"	.24
43 A 6255	6TM-S22	.022	600	7/16x1 1/4"	.24
43 A 5096	6TM-S25	.025	600	7/16x1 1/4"	.24
43 A 5078	6TM-S30	.03	600	7/16x1 1/4"	.24
43 A 5079	6TM-S40	.04	600	1/2x1 1/2"	.30
43 A 5098	6TM-S47	.047	600	1/2x1 1/2"	.30
43 A 5080	6TM-S50	.05	600	1/2x1 1/2"	.30
43 A 5081	6TM-S60	.06	600	1/2x1 1/2"	.30
43 A 5007	6TM-S68	.068	600	1/2x1 1/2"	.30
43 A 5082	6TM-P10	.1	600	5/8x1 7/8"	.48
43 A 5524	6TM-P15	.15	600	5/8x1 7/8"	.48
43 A 5525	6TM-P20	.2	600	3/4x2 1/4"	.84
43 A 5008	6TM-P22	.22	600	3/4x2 1/4"	.84
43 A 5083	6TM-P25	.25	600	3/4x2 1/4"	.84
43 A 6260	6TM-P50	.5	600	1x2 1/2"	1.08
43 A 6261	6TM-M1	1.0	600	1x2 1/2"	1.56
43 A 5928	10TM-T50	.0005	1000	5/16x1"	.27
43 A 5929	10TM-D10	.001	1000	5/16x1"	.21
43 A 5936	10TM-D50	.005	1000	3/8x1 1/4"	.24
43 A 5938	10TM-S10	.01	1000	7/16x1 1/4"	.24
43 A 5945	10TM-S50	.05	1000	5/8x1 7/8"	.48
43 A 5947	10TM-P10	.1	1000	3/4x2 1/4"	.84
43 A 5019	MB-D1	.001	1600	3/8x1 1/4"	.27
43 A 5161	MB-D5	.005	1600	1/2x1 1/2"	.33
43 A 5166	MB-S1	.01	1600	5/8x1 7/8"	.54
43 A 5168	MB-S2	.02	1600	5/8x1 7/8"	.54
43 A 6277	MB-S3	.03	1600	3/4x2 1/4"	.90
43 A 6278	MB-S4	.04	1600	3/4x2 1/4"	.90
43 A 6281	MB-S5	.05	1600	3/4x2 1/8"	1.14

TYPE AB MOTOR-STARTING CAPACITORS

Electrolytic capacitors for replacement in 110-volt AC capacitor-start motors. Intermittent duty. Hermetically sealed aluminum can with insulating cardboard for protection against moisture, dirt, grease. Lug terminals. Screws removable for solder connections. *Minimum and maximum capacitance values replaceable with these units. Type AB-1109 is for 1/8-hp motors; AB-1110, 1/6 hp; AB-1113 and AB-1116, 1/4 hp; AB-1125, 1/3 hp; AB-1131, 1/2 hp; AB-1146, 3/4 and 1 hp. Shpg. wt., 10 oz.

SIZE TABLE

From AB-	To AB-	Dia.	Lgth.
1104	1122	1 7/16"	2 3/4"
1125	1130	1 7/16"	3 3/8"
1131	1149	1 13/16"	3 3/8"
1152	1161	2 1/16"	4 3/8"

Stock No.	Type	*μF	EACH
43 A 5529	AB-1104	38-46	.76
43 A 5530	AB 1105	43-53	.76
43 A 5531	AB-1107	53-64	.77
43 A 5532	AB-1108	64-77	.81
43 A 5533	AB-1109	72-88	.83
43 A 5534	AB-1110	88-108	.78
43 A 5535	AB-1113	108-130	.86
43 A 5536	AB-1116	124 149	.89
43 A 5537	AB-1119	130-156	.89
43 A 5538	AB-1122	145-175	.96
43 A 5539	AB-1125	161-193	.98
43 A 5540	AB-1128	189-227	1 13
43 A 5541	AB-1130	200 240	1.17
43 A 5542	AB-1131	215-259	1.22
43 A 5543	AB-1134	233-280	1.35
43 A 5544	AB-1137	243-292	1.41
43 A 5545	AB-1140	270-324	1.43
43 A 5546	AB-1142	324 388	1.62
43 A 5547	AB-1143	340-408	1.67
43 A 5548	AB-1146	378 440	1.80
43 A 5549	AB-1149	400-480	1.82
43 A 5550	AB-1152	430-516	2.09
43 A 5552	AB-1158	560 648	2.45
43 A 5553	AB-1161	590-708	2.66

TUBULAR CAPACITOR ASSORTMENTS

TK28. 80 total. Dipped tubular capacitors. Leakproof, heat and humidity resistant. All units 600 WVDC. Contains the following values: 5 each: .001, .002, .0022, .0033, .0047, .005, .0068, .015, .02, .022, .033, .047, .05, .1 μF. 10 each: .01 μF. Assortment is complete with 6-drawer capacitor cabinet.
43 A 9998. Shpg. wt., 2½ lbs. **13.65**

TK29. 105 total. Double-dipped in orange epoxy resin. Dual dielectric—combines the best features of polyester film and special capacitor tissue. Solid impregnant—no leakage of oil or wax drippings. All units 600 WVDC. Contains the following values (all μF): 2 each: .0015; 3 each: .003, .068, .22, .25; 5 each: .001, .002, .0022, .0033, .0047, .005, .0068, .015, .02, .022, .03, .033, .1; 8 each: .047, .05; 10 each: .01. With 9-drawer cabinet. Shpg. wt., 3 lbs.
43 A 9999 . . . . **19.89**

TK33. 61 total. Black Beauty molded capacitors. Dual-dielectric. Impregnant is solid—no oil to leak, no wax to drip. All units 600 WVDC. Contains the following values (all μF): 5 each: .001, .002, .003, .005, .02, .03, .25; 8 each: .05, .1; 10 each: .01. With 6-drawer cabinet.
43 A 9996. Shpg. wt., 3 lbs. **19.59**

TK34. 90 total. Black Beauty capacitors. Tough, protective outer case of humidity-resistant, mica-filled, non-flammable molded phenolic—cannot be damaged in handling or installation. Leakproof. Will operate at 105° C with no voltage derating. All units 600 WVDC. Contains the following values (all μF): 2 each: .5; 3 each: .15, .22, .25; 5 each: .001, .0015, .003, .004, .005, .0068, .015, .020, .03; 8 each: .002, .05, .1; 10 each: .01. With 9-drawer cabinet.
43 A 9997. Shpg. wt., 4 lbs. **29.31**

Sprague Twist-Lok and Miniature Electrolytics

TVL "TWIST-LOK" AND PCL "PRINT-LOK" MIDGET CAN CAPACITORS

"Twist-Lok" hermetically sealed aluminum can capacitors. All rated +85°C. Up to 150 WVDC, tolerance is −10%, +100%; above 150 WVDC, −10%, +50%. Can is common negative. Terminals welded to cathode. *PCL "Print-Lok" types fit printed circuit mountings or std. twist-base mounts. With phenolic and metal mounting washers.

Size	Dia. x L	Size	Dia. x L	Size	Dia. x L	Size	Dia. x L	Size	Dia. x L	Size	Dia. x L	Size	Dia. x L
A	¾x2″	C	1x2½″	E	1x3½″	G	1⅜x2″	J	1⅜x3″	L	1⅜x4″	N	1⅜x4
B	1x2″	D	1x3″	F	1x4″	H	1⅜x2½″	K	1⅜x3½″	M	1x1½″	P	1x1¾

SINGLE SECTION Av. shpg. wt., 1 lb.

Stock No.	Capacity µF	WV DC	TVL-*PCL Type	TVL-*PCL Size	EACH
43 A 9620	225	15	1160	A	1.20
43 A 9364	1000	15	1165	M	1.77
43 A 9365	2000	15	1168	G	2.37
43 A 9366	3000	15	1170	G	2.94
43 A 9603	4000	15	1173	K	2.58
43 A 9362	500	25	1220	M	1.77
43 A 9363	1000	25	1230	G	2.46
43 A 9357	100	50	1317	A	1.14
43 A 9604	250	50	1324	B	1.38
43 A 9359	1000	50	1338	H	2.58
43 A 9360	1500	50	1341	H	3.05
43 A 9344	50	150	1415	M	1.14
43 A 9346	100	150	1423	M	1.38
43 A 9063	120	150	1425	B	1.50
43 A 9606	120	150	1426	H	1.50
43 A 9348	140	150	1428	C	1.50
43 A 9349	150	150	1429	D	1.50
43 A 9350	150	150	1430	G	1.50

Stock No.	Capacity µF	WV DC	TVL-*PCL Type	TVL-*PCL Size	EACH
43 A 9351	200	150	1431	G	1.68
43 A 9064	200	150	1431.1	D	1.68
43 A 9352	300	150	1434	G	1.95
43 A 9065	125	200	1470	C	1.95
43 A 9067	150	200	1471	D	1.95
43 A 9343	160	200	1473	G	2.19
43 A 9341	150	250	1540	G	2.13
43 A 9342	200	250	1547	H	2.52
43 A 9068	200	200	1475	G	2.19
43 A 9069	500	200	1490	L	2.94
43 A 9071	20	250	1509	M	1.11
43 A 9073	150	250	1539	D	2.13
43 A 9074	160	250	1541	H	2.13
43 A 9076	160	250	1541.1	F	2.13
43 A 9077	80	300	1573	C	1.77
43 A 9080	100	300	1578	C	2.01
43 A 9081	125	300	1580	H	2.43
43 A 9336	150	300	1584	K	2.43

Stock No.	Capacity µF	WV DC	TVL-*PCL Type	TVL-*PCL Size	EAC
43 A 9337	250	300	1590	J	3.8
43 A 9329	40	350	1621	B	1.3
43 A 9332	125	350	1638	H	2.7
43 A 9333	150	350	1642	H	2.7
43 A 9083	250	350	1644.2	K	3.3
43 A 9084	320	350	1645	K	3.3
43 A 9314	10	450	1705	M	1.0
43 A 9316	20	450	1714	B	1.
43 A 9317	30	450	1720	C	1.
43 A 9324	40	450	1725	C	1.4
43 A 9325	50	450	1728	C	1.
43 A 9326	80	450	1735	H	2.
43 A 9327	100	450	1750	H	2.
43 A 9328	125	450	1760	J	2.6
43 A 9308	20	500	1943	C	1.2
43 A 9310	40	500	1950	C	1.
43 A 9085	80	500	1958	H	2.
43 A 9312	90	500	1960	J	2.

DUAL SECTION Av. shpg. wt., 1½ lbs.

43 A 9120	1000-1000	15	2160	C	3.03
43 A 9117	100-100	50	2326	M	1.44
43 A 9102	40-40	150	2428	M	1.32
43 A 9104	50-30	150	*2432	B	1.38
43 A 9105	50-50	150	2435	M	1.50
43 A 9107	80-40	150	2442	G	1.59
43 A 9114	200-5	150	2444	G	1.86
43 A 9403	40-40	250	2520	D	1.71
43 A 9404	150-150	250	2535	H	3.54
43 A 9636	200-200	250	2538	L	4.17
43 A 9090	80-80	300	2585	H	2.79
43 A 9092	150-100	300	2591	J	3.72
43 A 9395	15-15	350	2625	B	1.56
43 A 9396	20-20	350	2626	B	1.59

43 A 9397	30-30	350	2628	C	2.01
43 A 9093	80-80	350	2635	H	2.82
43 A 9639	100-60	350	2639	K	3.30
43 A 9398	100-100	350	2641	J	4.23
43 A 9094	160-10	350	2643	J	2.97
43 A 9095	200-200	350	2645.5	N	4.29
43 A 9641	80-80	400-200	2656	K	2.73
43 A 9096	80-100	450-50	2711	J	2.58
43 A 9098	20-160	450-250	2722.7	H	2.64
43 A 9100	80-200	450-250	2722.8	N	3.96
43 A 9101	80-2	450-350	2738.5	H	2.31
43 A 9376	10-10	450	2750	B	1.32
43 A 9109	30-10	450	2757	C	1.65
43 A 9379	20-20	450	2755	C	1.77

43 A 9382	40-20	450	2762	G	2.2
43 A 9383	40-40	450	2764	H	2.3
43 A 9384	50-50	450	2767	J	2.6
43 A 9386	60-60	450	2772	J	3.0
43 A 9387	80-10	450	2776	J	2.4
43 A 9389	80-40	450	2778	K	3.4
43 A 9110	80-50	450	2778.5	K	3.1
43 A 9111	80-80	450	2779	K	3.6
43 A 9112	80-160	475-250	2808	N	3.8
43 A 9113	20-100	475-400	2813	J	3.0
43 A 9369	20-20	500	2935	G	1.9
43 A 9370	30-30	500	2937	H	2.2
43 A 9371	40-40	500	2940	H	2.97
43 A 9372	60-40	500	2944	K	3.1

TRIPLE SECTION Av. shpg. wt., 1½ lbs.

Stock No	Capacity µF	WV DC	TVL-*PCL Type	TVL-*PCL Size	EACH
43 A 9186	40-20-20	150	3437	M	1.65
43 A 9187	40-30-20	150	3438	B	1.71
43 A 9188	40-40-40	150	3440	P	1.80
43 A 9190	50-50-50	150	3442	B	2.07
43 A 9191	60-40-20	150	3443	P	1.89
43 A 9116	80-40-20	150	3444	B	2.01
43 A 9194	200-100-60	150	3450	H	3.15
43 A 9627	250-200-10	150	3453	L	3.27
43 A 9184	60-200-140	200-150-150	3461.4	J	3.30
43 A 9644	60-5-20	200-200-50	3467	C	1.71
43 A 9118	250-200-10	200	3490	L	4.59
43 A 9700	20-20-20	250	3532	P	1.80
43 A 9119	125-60-40	300-50	3574 6	L	3.60
43 A 9615	60-200-30	350-150-150	3608.6	J	3.45
43 A 9811	125-5-100	350-200-75	3610	J	3.66

Stock No.	Capacity µF	WV DC	TVL-*PCL Type	TVL-*PCL Size	EACH
43 A 9123	20-20-20	350-25	3635	B	2.01
43 A 9812	30-20-20	350-350-25	3636	B	2.13
43 A 9134	100-60-20	350-200	3639.2	L	3.75
43 A 9820	80-60-60	350	3642	K	3.84
43 A 9140	80-40-100	400-50	3683	J	3.45
43 A 9618	80-40-150	400-400-50	3684	L	3.63
43 A 9163	100-10-80	400-400-350	3689.3	K	4.20
43 A 9141	100-30-20	400	3697	K	3.78
43 A 9153	20-160-40	450-250-150	3711.3	K	3.15
43 A 9159	50-10-160	450-350-250	3719.4	N	5.46
43 A 9160	20-20-20	450-450-25	3739	D	2.10
43 A 9161	40-40-20	450-450-25	3744	H	2.70
43 A 9168	80-65-50	450-50	3754.9	K	3.78
43 A 9157	80-20-100	450-450-50	3757	K	3.30
43 A 9178	10-80-80	400-450	3775.7	N	4.11

Stock No.	Capacity µF	WV DC	TVL-*PCL Type	TVL-*PCL Size	EAC
43 A 9129	10-10-10	450	3776	B	1.8
43 A 9179	15-15-15	450	3778.2	C	2.1
43 A 9131	20-10-10	450	3779	D	2.0
43 A 9132	20-20-20	450	3780	G	2.4
43 A 9136	40-40-10	450	3785	H	2.8
43 A 9137	40-40-20	450	3786	H	3.0
43 A 9138	40-40-40	450	3787	J	3.3
43 A 9180	50-20-4	450	3787.5	E	2.5
43 A 9139	60-20-20	450	3789	J	3.1
43 A 9151	80-40-20	450	3793	J	3.7
43 A 9182	10-4-100	475-350-50	3806.6	B	1.8
43 A 9826	40-80-10	475-450-450	3816	L	3.7
43 A 9124	40-40-100	500-500-200	3935	L	3.9
43 A 9122	30-20-20	500	3956	J	2.9

FOUR SECTION Av. shpg. wt., 1½ lbs.

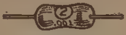
Stock No.	Capacity µF	WVDC	TVL Type	TVL Size	EACH
43 A 9091	60-40-20-200	150-150-150-10	4414	G	2.37
43 A 9079	40-40-40 30	150	4441	G	2.28
43 A 9828	200-200-60-30	175	4450	K	3.84
43 A 9831	10-200-140-30	300-150-150-150	4559	G	3.51
43 A 9072	100-10 200-30	300-300-150 150	4561	K	4.08
43 A 9196	140-10-200-30	300-150	4561.3	K	4.32
43 A 9833	150-30-30-150	300-300-300 50	4574	L	4.20
43 A 9722	40-40-20-10	300	4579	G	3.15
43 A 9197	150-100-10-5	300	4587	L	4.59
43 A 9198	10-20-10-50	350-200-50	4603.13	G	2.07
43 A 9199	5-100-20-100	350-200-25	4603.15	G	2.70
43 A 9853	140-100-20-20	350-300-300-300	4605.3	L	5.31
43 A 9866	160-60-10-4	350-300-300-300	4605.5	L	4.35
43 A 9200	5-20-100-100	350-200-50	4608.12	G	2.94
43 A 9066	60-40-60-20	350-350-200-150	4609	J	3.48
43 A 9202	250-20-20-50	350-25	4622.11	N	4.47
43 A 9211	90-30-5-100	350-75	4625	K	4.23
43 A 9237	70 40 1-50	350 50	4631	J	3.63
43 A 9240	100-40-30-50	350-50	4634	K	4.53
43 A 9872	40 40-40 40	350	4635.3	L	3.84
43 A 9055	80-60-40-20	350	4635.7	K	4.41
43 A 9242	40-80-100-100	400 350-200-50	4653	K	4.44
43 A 9052	40-80-100-25	400-350-200-50	4654	K	4.11
43 A 9244	40-80-10-100	400-350-200	4661.4	K	4.29
43 A 9251	80-40 100-20	400 50-25	4663.4	H	3.84
43 A 9253	100-10-30-20	400-50	4663.5	G	3.51
43 A 9255	80-40-10-20	400-25	4669	J	3.66
43 A 9873	100 10 20 20	400-400-350 50	4666.2	J	5.67
43 A 9050	80-40-30-40	400-400-400-25	4670	K	4.11
43 A 9875	80-40-10-100	400-400-400-200	4671.2	L	4.38
43 A 9876	80-40-30-4	400-400-400-350	4672	L	4.08
43 A 9256	20-160-50-50	450-250-75-50	4701.3	K	3.69
43 A 9264	80-20-100-25	450-350-25	4705.3	H	3.18

Stock No.	Capacity µF	WVDC	TVL Type	TVL Size	EAC
43 A 9300	10-140-100-20	450-350-300	4705.9	K	5.22
43 A 9301	50-20-4-40	450-150-25	4712.9	G	2.97
43 A 9305	50-40-4-40	450-150-25	4712.10	G	3.30
43 A 9313	80-30-20-50	450-250-50	4714.2	J	3.84
43 A 9318	30-20-160-40	450-250-150	4714.4	K	4.08
43 A 9319	30-50-100-250	450-250-50	4714.5	K	5.58
43 A 9334	80-50-20-50	450-250-50	4714.6	K	4.11
43 A 9335	30-20-160-10	450-250	4714.10	K	3.96
43 A 9354	30-20-4-200	450-350-250	4716.4	K	4.11
43 A 9878	40-40-30-30	450-450-350-350	4720	L	4.08
43 A 9043	40-30-10-20	450-450-450-25	4734	J	3.09
43 A 9046	40-40-40 40	450 450-450-25	4739	J	3.78
43 A 9380	80-50-10-20	450-25	4739.9	K	3.93
43 A 9385	20-30-80-40	450-150	4754	K	4.11
43 A 9388	30-20-10-20	450-350	4757.12	G	3.06
43 A 9031	10-10-10-10	450	4760	G	2.31
43 A 9033	20-20-20-20	450	4763	H	3.24
43 A 9034	30 30 20-20	450	4769.4	J	3.60
43 A 9036	40-40-20-20	450	4773	H	3.84
43 A 9037	40 40 30-30	450	4774	L	4.17
43 A 9038	40-40-40-40	450	4775	K	4.44
43 A 9887	20-80-20-10	475-300-300-300	4801	K	3.45
43 A 9896	10-80-40-100	475-400-400-50	4805.2	L	3.99
43 A 9391	80-4-4-200	475-450-25	4813.2	J	3.66
43 A 9392	50-18 4 40	475 150 25	4814 7	G	7.70
43 A 9399	100-4-4-200	475-25	4818.5	K	4.71
43 A 9400	80-4-4-4	475-450	4820.3	H	3.42
43 A 9406	50-40-4 40	475-150 25	4820.4	J	3.75
43 A 9408	80-80-4-4	475-450	4820.5	K	4.89
43 A 9023	20-20 10-10	475	4832	H	3.00
43 A 9024	20-20-20-20	475	4834	H	3.51
43 A 9025	40-20-10-10	475	4840	H	3.51
43 A 9020	10-10-10-10	500	4940	G	2.40

Specify Stock No., Mfr's. Type No. and Capacitance on Capacitor Order

Sprague Capacitors

CER" MINIATURE CAPACITORS



·times smaller than ·tional paper-film ·rs for easy use in ı transistorized circuitry. Extended foil ctions terminate in metal end caps. Non- ive. Wound with polyester film dielectric in gauge foil. Protected by mylar sleeve. 'VDC. Rated for −55°C to +85°C; 50% at 105°C. Capacitance tolerance, . Controlled dimensions, may be used utomatic insertion equipment. Average wt. each, 2 oz.

ck	Mfr's Type	μF	Size	EACH
0334	192P47192	.00047	9/64x5/16"	.33
0360	192P56192	.00056	9/64x5/16"	.30
0361	192P68192	.00068	9/64x5/16"	.30
0362	192P82192	.00082	9/64x5/16"	.30
0335	192P10292	.001	9/64x5/16"	.27
0336	192P12292	.0012	9/64x5/16"	.27
0337	192P15292	.0015	9/64x5/16"	.27
0338	192P18292	.0018	11/64x5/15"	.27
0339	192P22292	.0022	11/64x5/16"	.27
0341	192P33292	.0033	11/64x5/16"	.27
0342	192P39292	.0039	11/64x7/16"	.27
0343	192P47292	.0047	11/64x7/16"	.27
0344	192P56292	.0056	11/64x7/16"	.27
0345	192P68292	.0068	11/64x7/16"	.27
0346	192P82292	.0082	11/64x1/2"	.30
0347	192P10392	.01	11/64x1/2"	.30
0348	192P12392	.012	7/32x7/16"	.30
0349	192P15392	.015	7/32x7/16"	.30
0350	192P18392	.018	7/32x9/16"	.30
0352	192P22392	.022	7/32x9/16"	.30
0353	192P33392	.033	15/16x9/16"	.33
0354	192P39392	.039	19/64x1/2"	.36
0355	192P47392	.047	19/64x5/8"	.39
0356	192P56392	.056	19/64x5/8"	.39
0357	192P68392	.068	19/64x5/8"	.42
0358	192P82392	.082	21/64x5/8"	.45
0359	192P10492	.1	21/64x5/8"	.45
0366	192P12492	.12	21/64x7/8"	.48
0367	192P15492	.15	21/64x7/8"	.48
0368	192P22492	.22	21/64x1 1/8"	.51

ANSI-LYTIC" (31D) CAPACITORS

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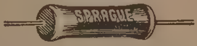


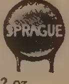
s **TL.** Designed for transistorized circuits. ic cases with thermosetting resin end seals. ating temperature range, −20°C to 'C. Tolerance, −10% to +100% of capacitance measured at 120 Hz and . **Important Note:** Values listed in table combine the highest voltage with the est case size. Example: 1 μF is only listed V, as all lower voltages are the same size price. Shpg. wt., 2 oz.

SIZE CHART

de	Size	Code	Size
	.180x.57	F	.312x.82
	.218x 57	G	.625x1.70
	.210x.70	H	.750x2.10
	.250x.82	J	.875x2.32
	.375x1.07	K	1.00x2.32

tock No.	Mfr's Type	μF	WV DC	Size Code	EACH
4117	TL1200	1	25	A	.42
4118	TL1201	2	25	A	.42
4095	TL1127	5	12	A	.42
4104	TL1152	5	16	B	.42
4112	TL1174	5	20	C	.45
4119	TL1202	5	25	D	.45
3959	TL1303	5	50	D	.45
4086	TL1086	8	6	A	.42
A 4113	TL1176	8	20	C	.45
A 4120	TL1203.5	8	25	D	.45
A 3998	TL1303.3	8	50	D	.45
A 4097	TL1128	10	12	C	.42
A 4121	TL1204	10	25	D	.45
A 4107	TL1157.1	25	16	D	.45
A 3999	TL1304	10	50	D	.45
A 4122	TL1207	25	25	E	.54
A 4006	TL1305.1	25	50	E	.57
A 4078	TL1058	50	3	D	.42
A 4099	TL1133	50	12	F	.42
A 4123	TL1209	50	25	E	.54
A 4079	TL1059.5	100	3	D	.45
A 4109	TL1162	100	16	E	.48
A 4092	TL1103.5	175	6	E	.60
A 4007	TL1214	250	25	G	.90
A 4071	TL1217	500	25	G	.99
A 4124	TL1218	1000	25	H	1.17
A 4147	TL1219	1500	25	J	1.44
A 4148	TL1220	2000	25	K	1.65
A 4149	TL1194	2500	20	K	1.65

"CERA-MITE" DISC CERAMICS



Ultracompact ceramic disc capacitors in EIA (RETMA) and other popular values. High by-pass efficiency. Moistureproof coating. Tolerance: ±20%. Tagged for identification. Sizes from 1/4" to 7/8". *Mfr's. type. Average shpg. wt., 2 oz.

SERIES 5GA—1000 WVDC

Stock No	*	pF	Stock No.	*	pF
43 A 6300	V50	5	43 A 6333	T33	330
43 A 6302	V75	7.5	43 A 6335	T36	360
43 A 6304	Q10	10	43 A 6336	T39	390
43 A 6305	Q12	12	43 A 6338	T47	470
43 A 6306	Q15	15	43 A 6339	T50	500
43 A 6308	Q20	20	43 A 6340	T56	560
43 A 6309	Q22	22	43 A 6342	T68	680
43 A 6310	Q25	25	43 A 6343	T75	750
43 A 6313	Q33	33	43 A 6345	T82	820
43 A 6315	Q47	47	43 A 5670	D10	1000
43 A 6316	Q50	50	43 A 6347	D12	1200
43 A 6317	Q56	56	43 A 6348	D13	1300
43 A 6318	Q68	68	43 A 5671	D15	1500
43 A 6319	Q75	75	43 A 6351	D18	1800
43 A 6320	Q82	82	43 A 6352	D20	2000
43 A 6322	T10	100	43 A 6353	D22	2200
43 A 6323	T12	120	43 A 6354	D25	2500
43 A 6325	T15	150	43 A 6356	D30	3000
43 A 6326	T18	180	43 A 6357	D33	3300
43 A 6327	T20	200	43 A 6358	D39	3900
43 A 6328	T22	220	43 A 6360	D43	4300
43 A 6330	T25	250	43 A 6361	D47	4700
43 A 6331	T27	270	43 A 6362	D50	5000
43 A 6332	T30	300	43 A 6363	S10	10,000

EACH .... .15

SERIES 5HK—500 AND 1000 WVDC

Stock No.	Type	μF	WVDC	EA.
43 A 8650	D10	.001	1000	.15
43 A 8651	D15	.0015	1000	.15
43 A 5672	D20	.002	1000	.15
43 A 8661	D33	.0033	1000	.15
43 A 8665	D47	.0047	1000	.15
43 A 5673	D50	.005	1000	.15
43 A 8666	D68	.0068	1000	.15
43 A 5674	S10	.01	1000	.15
43 A 8667	S15	.015	500	.15
43 A 9950	S20	.02	500	.15
43 A 8669	S25	.025	500	.15
43 A 9952	S40	.04	500	.27
43 A 9953	S50	.05	500	.27
43 A 9954	P10	.1	500	.54

SERIES 10TCC NPO CERAMICS

Zero temperature-coefficient capacitors. 1000 WVDC. All capacitors listed below are of the disc type. *Mfr's Type. Av. shpg. wt., 2 oz.

Stock No.	*	pF	Stock No.	*	pF
43 A 9955	V10	1.0	43 A 9965	Q25	25
43 A 9956	V15	1.5	43 A 9966	Q33	33
43 A 9957	V22	2.2	43 A 9967	Q39	39
43 A 9958	V33	3.3	43 A 9968	Q47	47
43 A 9959	V47	4.7	43 A 9969	Q50	50
43 A 9960	V68	6.8	43 A 9970	Q68	68
43 A 9961	Q10	10.0	43 A 9971	Q75	75
43 A 9962	Q15	15.0	43 A 9972	T10	100
43 A 9963	Q20	20.0	43 A 9973	T12	120
43 A 9964	Q22	22.0	43 A 9974	T15	150

EACH .... .15

Stock No.	Type	pF	EACH
43 A 9976	T22	220	.30
43 A 9977	T27	270	.33

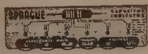
SERIES 10TCU N750 CERAMICS

A negative temperature coefficient capacitor with a negative change of 750 parts per million per degree Centigrade. 1000 WVDC. All capacitors listed below are disc type except *rectangular. Av. shpg. wt., 3 oz.

Stock No.	Type	pF	Stock No.	Type	pF
43 A 9978	V50*	5	43 A 9986	Q68	68
43 A 9979	Q10	10	43 A 9987	Q75	75
43 A 9980	Q15	15	43 A 9988	T10	100
43 A 9982	Q22	22	43 A 9989	T15	150
43 A 9983	Q25	25	43 A 9990	T20	200
43 A 9984	Q33	33	43 A 9991	T22	220
43 A 9985	Q47	47	43 A 9992	T33	330

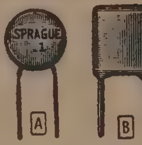
EACH .... .15

CAPACITANCE DECODER



Type C-751. Decodes μF, tolerance and WVDC from color codes. Shpg. wt., 2 oz.
43 A 9910 .... .25

LOW-VOLTAGE CERAMICS



Especially designed for circuits requiring extremely small components. Ideal for printed circuits, transistor-type radios, etc. Provide very dependable service in bypass and coupling applications. Have excellent humidity resistance.

A **Type TG.** Have heavy, protective coating. All are rated at 50 working volts, DC. Have tolerance of +80% to −20%, except S25 +80% to −30%. Av. shpg. wt., 3 oz.

Stock No.	Type	μF	Dia.	EACH
43 A 5995	D50	.005	5/16"	.15
43 A 5996	S10	.01	3/8"	.15
43 A 5997	S25	.025	19/32"	.15
43 A 5998	S50	.05	19/32"	.30
43 A 5999	P10	.1	3/4"	.39

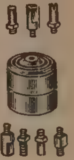
A **Hypercon Type.** Ultraminiature ceramic discs. Tolerance, guaranteed minimum value. All are rated 3 working volts, DC, except *10 WVDC. Shpg. wt., 2 oz.

Stock No.	Type	μF	Dia.	EACH
43 A 6671	HY-120	.1	.225"	.39
43 A 6672	HY-125	.22	.275"	.21
43 A 6673	HY-130	.47	.400"	.21
43 A 6674	HY-135	1.0	.595"	.24
43 A 6675	HY-150	2.2	.840"	.36
43 A 6394	HY-310*	.047	.275"	.15
43 A 6395	HY-320*	.1	.400"	.15
43 A 6396	HY-325*	.22	.595"	.24
43 A 6397	HY-330*	.47	.840"	.33

B **Monolythic Type.** Solid homogenous block construction assures excellent humidity resistance. Rated 25 working volts, DC. Temperature rating, −55° C to +85° C. Tolerance, ±20%. Size, 1/2x1/2x1/8". Av. shpg. wt. each, 2 oz.

Stock No.	Type	μF	EACH
43 A 6589	5C023104X0250B3	.1	.96
43 A 3382	5C023154X0250B3	.15	1.08
43 A 6698	5C023224X0250B3	.22	1.14
43 A 6699	5C023334X0250B3	.33	1.42
43 A 6825	5C023474X0250B3	.47	1.60
43 A 6823	5C023684X0250B3	.68	1.76
43 A 6824	5C023105X0250B3	1.0	2.00

DOORKNOB CAPACITORS



High-voltage, 500-pF plastic capacitors for replacement use in all types of TV sets. Molded-in nonflammable, moisture-resistant, thermosetting plastic. Molded guard rings increase surface leakage path. Capacitor body has female threads for variety of interchangeable screw-in terminals. 20DK-T5 comes complete with 7 terminals, as illustrated (packaged 2 per plastic box, with 14 terminals). 30DK-T5 is supplied with only 2 terminals. Shpg. wt., 3 oz.

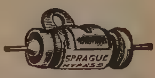
Stock No.	Mfr's Type	kV Rating	Diam. x Length	PRICE
43 A 5599	20DK-T5	20	1x31/32"	3.60pr.
43 A 5597	30DK-T5	30	15/16x1 1/4"	3.78ea.

SERIES BL TINY BUFFER CERAMICS

(Not illus.) Disc ceramics for buffer applications. Moisture-proof coating. Rated at 2000 WVDC. Standard tolerance, ±20%. Wt., 1 oz.

Stock No.	Mfr's Type	μF	EACH
43 A 6290	BL-D10	.001	.21
43 A 6294	BL-D50	.005	.21
43 A 6299	BL-S10	.010	.27

"HYPASS" CAPACITORS

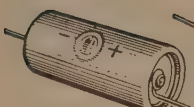


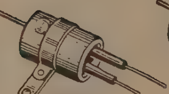
Three-terminal network feed-through capacitors bypass VHF currents where ordinary capacitors fail. Suppress TVI from short-wave transmitters, diathermy machines, electronic heating apparatus. Eliminate interference between neighboring TV sets. Install leads in series. Type 48P18 for voltage regulator. *Screw terminals. †AC volts. §Bulkhead mtg. Shpg. wt., 5 oz.

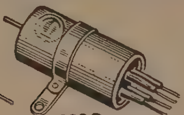
Stock No.	Type	μF	Amps	WVDC	Size	EACH
43 A 5688	48P18*	.5	40	50	1x1 13/16"	2.76
43 A 5970	48P9*	.1	20	250†	1 1/16x1 13/16"	1.80
43 A 5685	48P8*	.1	20	600	1 1/16x1 13/16"	1.80
43 A 5689	80P3*§	.1	20	600	1 1/16x1 13/16"	1.95
43 A 5697	47P16	.002	20	5000	1x1 9/16"	2.73

Cornell-Dubilier Capacitors

“BLUE BEAVER” TUBULAR ELECTROLYTICS


BBR


BBRD


BBRQ

Tubular electrolytic capacitors specifically designed for service placement applications. All are hermetically sealed in aluminum ca for protection against heat and humidity, and have cardboard ou sleeves. All have a common negative terminal which is grounded to can. Type BR section tabs and leads are riveted. Type BBR negati lead is riveted and positive lead is solidly crimped to an aluminum st Rated for operation up to +85°C, except 500 volt types which rated for temperatures up to +65°C. Av. shpg. wt., 6 oz.

BR/BBR* SINGLE SECTION

Stock No.	Type	µF	WV	Size In.	EA.
43 A 9203*	25 6	25	6	3/8x1 1/16	.51
43 A 9204*	50 6	50	6	3/8x1 1/16	.57
43 A 9205	100 6	100	6	1/8x1 1/16	.69
43 A 9206	250-6	250	6	1/2x1 1/16	.81
43 A 9285	500-6	500	6	1 1/2x1 7/16	.93
43 A 9286	1000 6	1000	6	5/8x1 11/16	1.14
43 A 9287	2000-6	2000	6	3/4x2	1.38
43 A 9207	100-15	100	15	1/2x1 1/16	.75
43 A 9272	250-15	250	15	1/2x1 1/16	.93
43 A 9273	500 15	500	15	1/2x1 7/16	1.05
43 A 9274	1000-15	1000	15	5/8x1 11/16	1.41
43 A 9284	2000-15	2000	15	3/4x2	1.68
43 A 9216*	10 25	10	25	3/8x1 1/16	.60
43 A 9217*	20 25	20	25	3/8x1 1/16	.60
43 A 9218*	25 25	25	25	3/8x1 1/16	.60
43 A 9219	50-25	50	25	1/2x1 1/16	.66
43 A 9208	100-25	100	25	1/2x1 1/16	.78
43 A 9270	250 25	250	25	1/2x1 7/16	1.02
43 A 9271	500-25	500	25	5/8x1 11/16	1.38
43 A 9222*	5 50	5	50	3/8x1 1/16	.60
43 A 9223*	10-50	10	50	3/8x1 1/16	.60
43 A 9224	25 50	25	50	1/2x1 1/16	.63
43 A 9147	100 50	100	50	1/2x1 7/16	.81
43 A 9148	150-50	150	50	5/8x1 7/16	.90
43 A 9149	250 50	250	50	3/4x1 7/16	1.05
43 A 9269	500-50	500	50	7/8x1 11/16	1.44
43 A 9214*	4-150	4	150	3/8x1 1/16	.60
43 A 9249	8-150	8	150	1/2x1 1/16	.63
43 A 9226	10 150	10	150	1/2x1 1/16	.63
43 A 9247	12-150	12	150	1/2x1 1/16	.66
43 A 9248	16-150	16	150	1/2x1 7/16	.69
43 A 9225	20-150	20	150	1/2x1 7/16	.69
43 A 9145	25 150	25	150	3/4x1 7/16	.75
43 A 4045	30-150	30	150	3/4x1 7/16	.75
43 A 4046	40-150	40	150	3/4x1 11/16	.81
43 A 4047	50-150	50	150	3/4x1 11/16	.84
43 A 9146	60-150	60	150	3/4x1 11/16	.87
43 A 4039	80-150	80	150	7/8x1 11/16	.93
43 A 4056	100-150	100	150	7/8x2	1.05
43 A 4057	150-150	150	150	1x2 3/16	1.11
43 A 4542	200-150	200	150	1x3	1.32
43 A 4543	300 150	300	150	1x3 13/16	1.77
43 A 9227	4-250	4	250	1/2x1 1/16	.63

BR/BBR SINGLE SECTION (Cont'd)

Stock No.	Type	µF	WV	Size In.	EA.
43 A 9228	8-250	8	250	1/2x1 7/16	.69
43 A 9229	12-250	12	250	1/2x1 7/16	.75
43 A 4033	16-250	16	250	3/4x1 7/16	.78
43 A 4034	20-250	20	250	3/4x1 7/16	.81
43 A 9142	30-250	30	250	3/4x1 11/16	.87
43 A 4035	40 250	40	250	3/4x2	.93
43 A 9143	50-250	50	250	7/8x1 11/16	1.05
43 A 9144	60-250	60	250	1x1 11/16	1.08
43 A 4020	4-350	4	350	5/8x1 1/16	.63
43 A 4021	8-350	8	350	5/8x1 7/16	.72
43 A 4022	12-350	12	350	3/4x1 7/16	.78
43 A 4023	16-350	16	350	3/4x1 7/16	.84
43 A 4018	20-350	20	350	3/4x1 7/16	.87
43 A 4019	30 350	30	350	3/4x2	.99
43 A 4026	40-350	40	350	7/8x2	1.05
43 A 4544	60-350	60	350	1x2	1.17
43 A 4545	80-350	80	350	1x3	1.35
43 A 4546	100 350	100	350	1x3	1.50
43 A 4008	1-450	1	450	5/8x1 1/16	.66
43 A 4009	2-450	2	450	5/8x1 1/16	.66
43 A 4010	4-450	4	450	5/8x1 1/16	.69
43 A 4011	8-450	8	450	3/4x1 7/16	.75
43 A 4012	10-450	10	350	3/4x1 7/16	.78
43 A 4013	12-450	12	450	3/4x1 7/16	.81
43 A 4014	16-450	16	450	3/4x1 11/16	.84
43 A 4015	20-450	20	450	7/8x1 11/16	.93
43 A 4016	30-450	30	450	1x2	1.02
43 A 4017	40-350	40	450	1x2 3/16	1.08
43 A 4004	60-450	60	450	1x3	1.41
43 A 4005	80-450	80	450	1x3 9/16	1.68
43 A 4547	100-450	100	450	1x3 13/16	1.92
43 A 9215	4-500	4	500	5/8x1 7/16	.72
43 A 4000	8-500	8	500	3/4x1 7/16	.78
43 A 4001	16-500	16	500	7/8x1 11/16	.90
43 A 4002	20-500	20	500	7/8x2	.96
43 A 4003	30-500	30	500	1x2	1.05
43 A 4539	10-700	10	700	1 1/16x3 3/16	1.86
43 A 4541	16-700	16	700	1 1/16x4 5/16	2.25

BBRD DUAL SECTION

43 A 9250	115	10-10	50	3/4x1 1/16	.84
43 A 9252	2215	20-20	150	3/4x1 1/16	.93

BBRD DUAL SECTION (Cont'd)

Stock No.	Type	µF	WV	Size In.	E
43 A 9254	3315	30-30	150	7/8x1 11/16	1.
43 A 9257	4415	40-40	150	7/8x2	1.
43 A 9258	5315	50-30	150	7/8x2	1.
43 A 9259	5515	50-50	150	1x2	1.
43 A 9260	8415	80-40	150	1x2 3/16	1.
43 A 8609	0183.7	100-50	150	1x3	1.
43 A 9288	101015	100-100	150	1x3	1.
43 A 9289	8D25	8-8	250	3/4x1 7/16	.
43 A 9263	2225	20-20	250	1x1 11/16	1.
43 A 9296	3325	30-30	250	1x2 3/16	1.
43 A 8614	0286	150-100	300	1 3/8x4 3/16	3.
43 A 9265	8D45	8-8	450	7/8x1 11/16	1.
43 A 9267	16D45	16-16	450	1x2 1/2	1.
43 A 9268	2245	20 20	450	1x3	1.
43 A 9297	3345	30-30	450	1 1/8x3 9/16	1.
43 A 9221	4445	40-40	450	1x4 1/16	2.

BBRT TRIPLE SECTION

Stock No.	Type	µF	WV	Size, In.	EA
43 A 9230	22215	20-20-20	150	7/8x1 11/16	1.
43 A 9231	32V215	30-25-20	150	7/8x2	1.
43 A 9232	33315	30-30-30	150	1x2	1.
43 A 9233	42215	40-20-20	150	1x1 11/16	1.
43 A 9234	43215	40 30-20	150	1x2	1.
43 A 9235	44215	40-40-20	150	1x2	1.
43 A 9236	44415	40-40-40	150	1x2 3/16	1.
43 A 9298	84215	80-40-20	150, 25	1x2	1.
43 A 8620	0126.5	150-150-150	150	1 3/8x4 3/16	2.
43 A 9239	4215C	40-20, 20	150, 25	1x1 11/16	1.
43 A 9243	5315C	50-30, 20	150, 25	1x1 11/16	1.
43 A 9245	8415C	80-40, 20	150, 25	1x2 1/2	1.
43 A 8621	0185	40-40, 40	300	1 1/8x3	2.
43 A 9282	16T45	16-16-16	450	1 3/8x3	1.

BBRQ QUADRUPLE SECTION

Stock No.	Type	µF	WV	Size, In.	EA
43 A 9290	33215C	30-30-20-20	150	1x3	1.
43 A 9293	44315C	40-40-30, 20	150, 25	1x2 1/2	1.
43 A 9294	55515C	50-50-50, 20	150, 25	1x3	2.
43 A 8628	0789.4	140-5,200-30	300, 500	1 1/2x4 3/16	3.
43 A 8635	0174	40-40-20, 20	450	1 3/8x4 3/16	3.

TYPE WMF TUBULAR “MYLAR” CAPACITORS

Film-encased ultra-compact tubular capacitors featuring a "Mylar" film dielectric. Exceptional strength, durability and stability. Offer high insulation resistance, low power factor, and operation at temperatures from −55°C to +125°C. End-sealed with high-density thermosetting plastic. Non-inductive, extended foil construction with tinned wire leads soldered direct to foil for low-resistance and low RF impedance. Power factor, less than 1% at 25°C. Tolerance, ±10%. Av. shpg. wt., 2 oz.

100 WVDC

Stock No.	Type WMF-	µF	Size	EA.
43 A 6975	1D1	.001	5/32x1/2″	.27
43 A 6977	1D22	.0022	5/32x1/2″	.27
43 A 6979	1D47	.0047	5/32x1/2″	.27
43 A 6981	1S1	.01	13/64x1/2″	.27
43 A 6983	1S22	.022	9/32x5/8″	.27
43 A 6984	1S33	.033	19/64x5/8″	.27
43 A 6985	1S47	.047	17/64x3/4″	.27
43 A 6986	1S68	.068	9/32x3/4″	.30
43 A 6987	1P1	.1	19/64x7/8″	.30
43 A 6988	1P15	.15	31/64x7/8″	.30
43 A 6989	1P22	.22	25/64x1″	.33
43 A 6990	1P33	.33	27/64x1 1/8″	.39
43 A 6991	1P47	.47	15/32x1 1/4″	.45
43 A 6992	1P68	68	9/16x1 1/4″	.60
43 A 6993	1W1	1.0	5/8x1 1/2″	.84
43 A 6995	1W1P5	1.5	25/32x1 3/4″	1.11
43 A 6996	1W2	2.0	61/64x1 3/4″	1.35

200 WVDC

43 A 6877	2D1	.001	5/32x1/2″	.27
43 A 6879	2D22	.0022	5/32x1/2″	.27
43 A 6881	2D47	.0047	11/64x1/2″	.27
43 A 6882	2D68	.0068	13/64x1/2″	.27
43 A 6883	2S1	.01	15/64x1/2″	.27
43 A 6884	2S15	.015	19/64x1/2″	.27

200 WVDC (Cont'd)

Stock No.	Type WMF-	µF	Size	EA.
43 A 6885	2S22	.022	9/32x5/8″	.27
43 A 6886	2S33	.033	17/32x3/4″	.27
43 A 6887	2S47	.047	21/64x3/4″	.27
43 A 6888	2S68	.068	11/32x3/4″	.30
43 A 6889	2P1	.1	13/32x7/8″	.36
43 A 6890	2P15	.15	1/2x7/8″	.36
43 A 6891	2P22	.22	1/2x1 1/8″	.39
43 A 6892	2P33	.33	35/64x1 1/8″	.45
43 A 6893	2P47	.47	19/32x1 1/4″	.51
43 A 6894	2P68	.68	21/32x1 5/8″	.60
43 A 6895	2W1	1.0	3/4x1 3/4″	.84
43 A 6898	2W2	2.0	63/64x1 7/8″	1.35

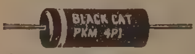
400 WVDC

43 A 4329	4D1	.001	5/32x5/8″	.30
43 A 4330	4D22	.0022	5/32x5/8″	.30
43 A 4331	4D47	.0047	13/64x5/8″	.30
43 A 6832	4S1	.01	19/64x5/8″	.30
43 A 6834	4S22	.022	5/16x3/4″	.30
43 A 6835	4S33	.033	11/32x7/8″	.30
43 A 6836	4S47	.047	13/32x7/8″	.30
43 A 6837	4S68	.068	25/64x1″	.33
43 A 6838	4P1	.1	15/32x1″	.33
43 A 6839	4P15	.15	33/64x1 1/4″	.36
43 A 6840	4P22	.22	9/16x1 3/8″	.42
43 A 6841	4P33	.33	19/32x1 5/8″	.66
43 A 6842	4P47	.47	45/64x1 5/8″	.78
43 A 6844	4W1	1.0	7/8x2″	1.14
43 A 6847	4W2	2.0	1 1/4x2 1/4″	1.86

600 WVDC

43 A 4312	6D1	.001	11/64x3/4″	.33
43 A 4318	6D22	.0022	3/16x3/4″	.33
43 A 4323	6D47	.0047	15/16x3/4″	.33
43 A 2715	6S1	.01	19/64x1/4″	.33
43 A 2717	6S22	.022	21/64x7/8″	.33
43 A 2719	6S47	.047	27/64x1″	.33
43 A 2721	6P1	.1	33/64x1 3/8″	.45
43 A 2723	6P22	.22	21/32x1 5/8″	.54
43 A 2725	6P47	.47	55/64x2″	1.14
43 A 2727	6W1	1.0	1 11/64x2 1/2″	2.43

TYPE PKM “BLACK CAT” KRAFT PAPER MYLAR CAPACITORS



Molded axial le capacitors wi combination p per/Mylar d electric impregnated with Dykanol Y, a so stable impregnant. Extremely moisture resi ant. Molded plastic cases. Note: 400 WVD units are identical in price and size to 2 WVDC units. Temperature range −55°C +125°C. Tolerance, ±10%. Av. wt., 3 oz.

400 WVDC

Stock No.	Type PKM-	µF	Size	EA
43 A 4209	4D47	.0047	/16x1″	.2
43 A 4204	4D5	.005	/16x1″	.2
43 A 4210	4S1	.01	/16x1″	.2
43 A 4207	4S25	.025	3/8x1 1/4″	.2
43 A 4214	4S47	.047	7/16x1 1/4″	.2
43 A 4221	4S5	.05	7/16x1 1/4″	.2
43 A 4216	4P1	.1	1/2x1 1/2″	.2
43 A 4218	4P22	.22	5/8x1 7/8″	.3
43 A 4231	4P5	.5	11/16x1 1/16″	.6

600 WVDC

43 A 4242	6D5	.005	3/8x1 1/4″	.2
43 A 4226	6S1	.01	3/8x1 1/4″	.2
43 A 4228	6S22	022	3/8x1 1/4″	.2
43 A 4230	6S47	047	1/2x1 1/2″	.2
43 A 4243	6S5	.05	1/2x1 1/2″	.2
43 A 4232	6P1	.1	9/16x1 9/16″	3
43 A 4235	6P22	.22	11/16x1 1/16″	.5
43 A 4239	6P47	.47	1x2 1/8″	.8
43 A 4256	6P5	.5	1x2 1/8″	.9

1600 WVDC

43 A 4252	16D1	.001	3/8x1 1/4″	.2
43 A 4253	16D22	.0022	3/8x1 1/4″	.2
43 A 4255	16D47	.0047	3/8x1 1/4″	.3
43 A 4259	16S1	.01	1/2x1 1/2″	.4
43 A 4262	16S22	.022	5/8x1 7/8″	.5
43 A 4264	16S47	.047	5/8x1 7/8″	.6

Mallory Capacitors

TYPE MTV ALUMINUM ELECTROLYTIC CAPACITORS

Molded tubulars in moisture-tight plastic case. 3 molded Tandoff mounts for PC boards. #20 AWG leads, spaced .200". stemp. range, −30° to +65°C continuous; to +85°C intermittent. 1000 hour life test at 65°C. Capacity tol., ±10%. +100% at 25°C, 120 Hz. Case size indicated in Mfr's type. See table at right. Av. shpg. wt., 1 oz.

MALLORY
500 MFD. 15 VDC
MTV 505

e	Dia.xL.	Case	Dia.xL.	Case	Dia.xL.
	3/8x1 3/16"	CP	3/8x1 9/16"	DN	1/2x1 1/2"
	3/8x1 5/16"	DE	1/2x1"	.....	....
	3/8x1 1/16"	DJ	1/2x1 1/4"	.....	....

tock No.	Type MTV-	µF	WV DC	EACH
A 2664	1000DN3	1000	3	.60
A 2665	100CB6	100	6	.42
A 2669	400DE6	400	6	.48
A 2670	500DJ6	500	6	.54
A 2672	70CB10	70	10	.42
A 2673	100CD10	100	10	.42
A 2675	250CP10	250	10	.48
A 2676	300DE10	300	10	.54
A 2677	400DJ10	400	10	.56
A 2679	50CB15	50	15	.42
A 2682	90CD15	90	15	.42
A 2683	100CF15	100	15	.42

Stock No.	Type MTV-	µF	WV DC	EACH
43 A 2686	250DE15	250	15	.54
43 A 2687	400DJ15	400	15	.60
43 A 2688	500DN15	500	15	.60
43 A 2690	50CD25	50	25	.42
43 A 2693	100CP25	100	25	.48
43 A 2694	200DJ25	200	25	.60
43 A 2695	250DN25	250	25	.60
43 A 2697	50CF35	50	35	.48
43 A 2699	100DE35	100	35	.54
43 A 2701	200DN35	200	35	.60
43 A 2702	1CB50	1	50	.40
43 A 2703	2CB50	2	50	.40

Stock No.	Type MTV-	µF	WV DC	EACH
43 A 2704	3CB50	3	50	.40
43 A 2705	4CB50	4	50	.40
43 A 2706	5CB50	5	50	.40
43 A 2707	6CB50	6	50	.40
43 A 2710	10CB50	10	50	.42
43 A 2711	15CD50	15	50	.42
43 A 2712	20CD50	20	50	.42
43 A 2713	25CF50	25	50	.48
43 A 2750	50DE50	50	50	.48
43 A 2752	100DN50	100	50	.60
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....	....	......	.....	......

TYPE MTA TUBULAR ALUMINUM ELECTROLYTICS

tock No.	Type MTA-	µF	WV DC	Size*	EACH
A 0411	450F6	450	6	C	.51
A 0412	500F6	500	6	C	.51
A 0413	40D10	40	10	A	.36
A 0415	100E10	100	10	B	.40
A 0416	200F10	200	10	C	.45
A 0418	30D15	30	15	A	.36
A 0419	35D15	35	15	A	.36
A 0420	50E15	50	15	B	.40
A 0431	100E15	100	15	B	.40
A 0433	300F15	300	15	C	.57
A 0434	350F15	350	15	C	.57
A 0435	25D20	25	20	A	.36
A 0441	60E20	60	20	B	.40
A 0445	70E20	70	20	B	.40
A 0447	50E25	50	25	B	.40
A 0452	175F25	175	25	C	.54
A 0456	20D30	20	30	A	.36
A 0457	40E30	40	30	B	.40
A 0460	15D35	15	35	A	.36
A 0461	25E35	25	35	B	.40
A 0462	30E35	30	35	B	.40
A 0463	35E35	35	35	B	.40

Stock No.	Type MTA-	µF	WV DC	Size*	EACH
43 A 0465	100F35	100	35	C	.51
43 A 0481	125F35	125	35	C	.54
43 A 0482	150F35	150	35	C	.57
43 A 0483	1D50	1	50	A	.36
43 A 0484	2D50	2	50	A	.36
43 A 0485	3D50	3	50	A	.36
43 A 0486	4D50	4	50	A	.36
43 A 0487	5D50	5	50	A	.36
43 A 0488	6D50	6	50	A	.36
43 A 0489	7D50	7	50	A	.36
43 A 0490	8D50	8	50	A	.36
43 A 0492	10E50	10	50	B	.40
43 A 0493	15E50	15	50	B	.40
43 A 0494	20E50	20	50	B	.40
43 A 0495	25F50	25	50	C	.45
43 A 0501	30F50	30	50	C	.45
43 A 0505	35F50	35	50	C	.45
43 A 0506	40F50	40	50	C	.45
43 A 0524	50F50	50	50	C	.45
43 A 0525	60F50	60	50	C	.51
43 A 0526	70F50	70	50	C	.51
43 A 0529	80F50	80	50	C	.54

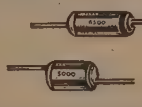
Special precision molding process ensures case uniformity, higher than average quality. Polypropylene case for humidity protection. Welded construction. Temp. range., −20°C to +65°C. Cap. tol., −10%, +100%. 2-oz.

CASE SIZES

*Code Letter	Size Dia. x Length
A	5/16x3/4"
B	3/8x1"
C	1/2x1 3/8"

Stock No.	Type MTA-	µF	WV DC	Size*	EACH
43 A 0405	60D3	60	3	A	.36
43 A 0406	175E3	175	3	B	.45
43 A 0407	600F3	600	3	C	.45
43 A 0408	50D6	50	6	A	.36
43 A 0409	125E6	125	6	B	.40
43 A 0410	150E6	150	6	B	.40

E SX POLYSTYRENE CAPACITORS



High Temperature stability

Long Life

Power Factor less than .05%

lory type SX capacitors are manufactured 1 a unique form of stretched polystyrene ectric and high-purity aluminum foil. Polyene foil capacitors replace mica, film, er and ceramic types in most applications.

vide excellent temperature stability and idity protection. Lightweight, low-cost acitors are perfect for applications requiring life expectancy. Leakage resistance is ter than 100,000 megohms. Low capacie drift. Power factor, less than 0.05%.

: operating stability within temperature ge of −10°C to +85°C. All are rated at 600 DC; surge, 1500 VDC. Capacitance toler- is ±5%. Capacitance range is 5 pF to .01 in all standard ratings. Lengths: * .395"; 9"; ‡ .59" to .79". Av. shpg. wt., 1 oz.

CAPACITANCE RANGE CHART

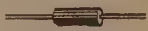
F	pF	pF	pF	pF
5	56	240	1000	3900
0	62	270	1100	4300
2	68	300	1200	4800
5	75	330	1300	5000
8	82	360	1500	5100
0	91	390	1600	5600
2	100	430	1800	6200
4	110	470	2000	6800
7	120	510	2200	7500
0	130	560	2400	8200
3	150	620	2500	9100
6	160	680	2700	10000
9	180	750	3000	....
3	200	820	3300	....
7	220	910	3600	....

PRICE AND SIZE LOCATOR

Stock No.	Capacity pF	Dia. Inches	EACH
A 0400 C	5-300	* 165-.255	.12
A 0401 C	330-1000	†.194 .233	.12
A 0402 C	1100-3000	† 238 .348	.15
A 0403 C	3300-5000	‡.366 .466	.18
A 0404 C	5100-10K	‡ 470-.590	.21

TAC SERIES SOLID TANTALUM CAPACITORS

High-reliability solid tantalum capacitors in precision-molded cases for high-density stacking in computers and similar equipment. Inert plastic tubular cases have high dielectric strength and provide excellent enrironmental protection. Rated −55° C to +85° C. Low leakage currents, high stability. ±20% tolerance. Size .105x.290. Average shpg. wt., 1/10 oz.



Stock No.	Type TAC-	Cap. µF	WVDC	EACH
43 A 0781	126M006P02	12	6	.58
43 A 0782	106M006P02	10	6	.58
43 A 0783	825M006P02	8.2	6	.58
43 A 0784	685M010P02	6.8	10	.58
43 A 0785	565M010P02	5.6	10	.58
43 A 0786	475M010P02	4.7	10	.58
43 A 0787	395M010P02	3.9	10	.58
43 A 0788	335M010P02	3.3	10	.58
43 A 0789	275M015P02	2.7	15	.58

Stock No.	Type TAC-	Cpa. µF	WVDC	EACH
43 A 0790	225M020P02	2.2	20	.58
43 A 0791	185M020P02	1.8	20	.58
43 A 0792	155M020P02	1.5	20	.58
43 A 0793	125M020P02	1.2	20	.58
43 A 0794	105M020P02	1.0	20	.58
43 A 0795	824M035P02	.82	35	.58
43 A 0796	684M035P02	.68	35	.58
43 A 0797	474M050P02	.47	50	.82
43 A 0798	334M050P02	.33	50	.82

MTP ULTRAMINIATURE TANTALUM CAPACITORS

- Higher capacity-voltage product than wet slug
- Meets MIL-STD-202 environmental specifications

Sintered tantalum anode, polar wet slug capacitors offer higher capacity voltage production than ordinary wet slug, solid or foil tantalum capacitors. Meet **MIL-STD-202** specifications for high frequency vibration, shock, temperature cycling, moisture resistance, and sleeve strength. Low-profile geometry, with silver case, closed on elastomer end seal. Insulated sleeve. Ambient temperature range −55°C to +85°C. Capacitance tolerance: ±20%. Maximum DC leakage, 2µA at 25°C. Average shpg. wt., 1 oz.

Stock No.	Type MTP-	Cap. µF	WV DC	EACH
43 A 0552	335M060P1D	3.3	60	2.57
43 A 0650	405M050P1D	4	50	2.57
43 A 0553	475M035P1D	4.7	35	2.57
43 A 0559	475M060P1A	4.7	60	2.59
43 A 0651	605M030P1D	6	30	2.57
43 A 0561	685M020P1D	6 8	20	2.57
43 A 0652	685M050P1A	6.8	50	2.59
43 A 0563	685M060P1A	6.8	60	2.59
43 A 0577	106M010P1D	10	10	2.57
43 A 0653	106M030P1A	10	30	2.59
43 A 0654	106M035P1A	10	35	2.59
43 A 0578	106M060P1B	10	60	3.11
43 A 0579	156M006P1D	15	6	2.57
43 A 0581	156M020P1A	15	20	2.59
43 A 0582	156M060P1B	15	60	3.11
43 A 0600	226M015P1A	22	15	2.59
43 A 0655	226M060P1B	22	60	3.11
43 A 0656	306M050P1B	30	50	3.11
43 A 0602	336M010P1A	33	10	2.59
43 A 0657	336M050P1B	33	50	3.11
43 A 0603	336M060P1C	33	60	3.62
43 A 0658	456M030P1B	45	30	3.11

Stock No.	Type MTP-	Cap. µF	WV DC	EACH
43 A 0605	476M006P1A	47	6	2.59
43 A 0607	476M020P1B	47	20	3.11
43 A 0608	476M060P1C	47	60	3.62
43 A 0659	606M020P1B	60	20	3.11
43 A 0609	686M015P1B	68	15	3.11
43 A 0610	686M050P1C	68	50	3.62
43 A 0660	786M050P1C	78	50	3.62
43 A 0661	806M015P1B	80	15	3.11
43 A 0662	107M010P1B	100	10	3.11
43 A 0663	107M035P1C	100	35	3.62
43 A 0664	127M010P1B	120	10	3.11
43 A 0613	157M006P1B	150	6	3.11
43 A 0614	157M020P1C	150	20	3.62
43 A 0665	127M030P1C	120	30	3.62
43 A 0666	187M006P1B	180	6	3.11
43 A 0667	207M015P1C	200	15	3.62
43 A 0668	227M015P1C	220	15	3.62
43 A 0669	307M010P1C	300	10	3.62
43 A 0616	337M010P1C	330	10	3.62
43 A 0670	457M006P1C	450	6	3.62
43 A 0618	477M006P1C	470	6	3.62
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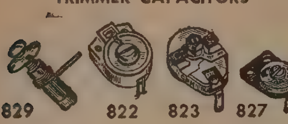
Centralab Ceramic Capacitors

TRIMMER CAPACITORS



Unusually compact, stable trimmer capacitors with ceramic dielectric. Lightweight, easily mounted. Need only a screwdriver for perfect, simple adjustment. Provide a smooth, linear rate of capacitance change. Full capacity range with just 180° rotation. Balanced rotor and heavy spring pressure for excellent mechanical stability, even under extreme conditions of heavy vibration. Silver is fired to stator and rotor, which make contact on flat optically ground surface to eliminate air space. All types rated at 500 working volts, DC. Power factor: less than ±0.2% at 1 megahertz. Type 822 and Type 823 are constructed with steatite base, Type 827 with phenolic base, 829 is tubular ceramic (furnished with mounting screw and nut). Letter N in Type Number indicates negative temperature coefficient, letter Z in Type Number indicates zero temperature coefficient. Average shpg. wt., 2 oz.

TYPE 822

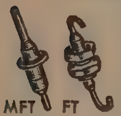
Stock No.	Mfr's Type	pF Range	Base Size	EACH
43 A 1651	822-EN	4-30	27/32x41/64"	1.14
43 A 1125	822-CN	4.5-25	27/32x41/64"	1.14
43 A 1124	822-BN	7-45	27/32x41/64"	1.14
43 A 1123	822-AN	8-50	27/32x41/64"	1.14
43 A 1653	822-EZ	1.5-7	27/32x41/64"	1.14
43 A 1128	822-BZ	2.5-13	27/32x41/64"	1.14
43 A 1654	822-FZ	3-12	27/32x41/64"	1.14
43 A 1127	822-AZ	4.5-25	27/32x41/64"	1.14

TYPES 823, 827 AND 829

*Dimension given is for body length.

Stock No.	Mfr's Type	pF Range	Base Size	EACH
43 A 1510	823-AN	20-125	15/16x17/32"	3.60
43 A 1513	823-AZ	12-62	15/16x17/32"	3.60
43 A 1517	827-B	3.5-12	17/32x¾"	.90
43 A 1518	827-C	6-30	17/32x¾"	.90
43 A 1519	827-D	7-35	17/32x¾"	.90
43 A 1400	829-3	.5-3	*½"	.30
43 A 1402	829-6	1-6	*⅝"	.30
43 A 1404	829-10	1.5-10	*¾"	.30

FEED-THRU HI-KAPS



Tiny ceramics for single-hole mounting. Specifically designed for, widely used in high frequency circuits. Rated 500 WVDC. Type FT has 12-28 mounting nut and .050" dia. tinned copper leads with hooked ends. MFT has ¼" dia. hole and solders to chassis (has No. 16 leads). Tolerance; *±20%; †−20 to +50%; §±10%; ‡GMV (guaranteed minimum value). Av. shpg. wt., 2 oz.

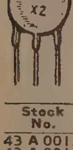
TYPE MFT MINIATURES

Stock No.	Type	pF	EACH
43 A 1488	MFT-50	§ 50	.30
43 A 1489	MFT-100	§ 100	.30
43 A 1490	MFT-500	* 500	.30
43 A 1491	MFT-1000	‡1000	.30

TYPE FT

43 A 1390	FT- 500	* 500	.75
43 A 1391	FT-1000	*1000	.75
43 A 1392	FT-1500	†1500	.75
43 A 1394	FT-2300	†2300	.75

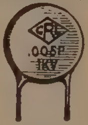
DD-2 CERAMIC DISC CAPACITORS



Dual-capacity single disc ceramic capacitors fill a wide variety of needs in today's compact circuitry. Feature double Durez resin insulation. Stamped with capacitance for easy identification. Operating temperature range: −55°C to +85°C. Dissipation factor: 2% maximum at 1 kHz. Tolerance: −20% to+80%. 600 WVDC; 1200 VDC test. Average shpg. wt., 1 oz.

Stock No.	Mfr's Type	pF	Dia. (in.)	EACH
43 A 0015	DD2-102	2x.001	.408	.19
43 A 0016	DD2-152	2x.0015	.594	.19
43 A 0017	DD2-502	2x.005	.719	.285

SERIES DD DISC CERAMIC CAPACITORS

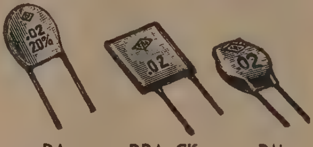


Recommended for use where high capacitance is required and control stability is secondary. Operate for long periods under extreme moisture, vibration and temperature conditions. Temperature range: −55°C to +85°C. Protected by Durez coating. 10 WVDC except: DD-6-103, DD-15 DD-203, DD-503, 600 WVDC. Tole ance: ±10% except †GMV; ‡±20% §−20%, +80%. Stamped for ident fication. ¼"x5/32". Av. shpg. wt., 2 o

Stock No.	Mfr's Type	pF	EACH
43 A 1407	DD-050	5	.15
43 A 1409	DD-100	10	.15
43 A 1410	DD-150	15	.15
43 A 1411	DD-200	20	.15
43 A 1525	DD-220	22	.15
43 A 1412	DD-250	25	.15
43 A 1527	DD-270	27	.15
43 A 1528	DD-300	30	.15
43 A 1413	DD-330	33	.15
43 A 1450	DD-390	39	.15
43 A 1415	DD-470	47	.15
43 A 1416	DD-500	50	.15
43 A 1417	DD-560	56	.15
43 A 1418	DD-680	68	.15
43 A 1451	DD-820	82	.15
43 A 1420	DD-101	100	.15
43 A 1421	DD-121	120	.15
43 A 1422	DD-151	150	.15
43 A 1423	DD-181	180	.15
43 A 1424	DD-201	200	.15
43 A 1425	DD-221	220	.15
43 A 1426	DD-251	250	.15
43 A 1427	DD-271	270	.15
43 A 1428	DD 301	300	.15
43 A 1429	DD-331	330	.15
54 A 1430	DD-391	390	.15

Stock No.	Mfr's Type	pF	EAC
43 A 1431	DD-471	470	.15
43 A 1432	DD-501	500	.15
43 A 1433	DD-561	560	.15
43 A 1434	DD-681	680	.15
43 A 1435	DD-751	750	.15
43 A 1537	DD-821	820	.15
43 A 1437	DD-102	1000	.15
43 A 1707	DD-102G	1000†	.15
43 A 1438	DD-152	1500	.15
43 A 1403	DD-182	1800	.15
43 A 1439	DD-202	2000†	.15
43 A 1542	DD-222	2200†	.15
43 A 1406	DD-252	2500†	.15
43 A 1452	DD-272	2700†	.15
43 A 1440	DD-302	3000†	.15
43 A 1600	DD-332	3300†	.15
43 A 1441	DD-472	4700†	.15
43 A 1442	DD-5022	5000‡	.15
43 A 1037	DD-502	5000†	.15
43 A 1605	DD-682	6800†	.15
43 A 1615	DD-103	10,000†	.24
43 A 1106	DD-1032	10,000‡	.24
43 A 1453	DD-6-103	10,000†	.24
43 A 1686	DD-153	15,000§	.24
43 A 1042	DD-203	20.000§	.45
43 A 1689	DD-503	50,000§	.45

LOW-VOLTAGE CAPACITORS



DA DDA, CK DM

Extremely compact, high-capacity, low-voltage ceramic capacitors. Have durable "Durez" resin insulation. Designed especially for transistor circuits and other subminiature applications. Resist effects of heat, moisture and vibration. Av. shpg. wt., 2 oz.

Type DA: ½x½x3/16" thick. Tolerance −20% to +100%. Rated at 30 WVDC.

Type DDA: All measure ⅝" diameter x 5/32" thick. Tolerance −30% to +80%. Rated at 75 WVDC.

Type DM: 17/32x7/32x7/64" thick. Tolerance *−20% to +50% and †−20% to +80%. Rated at 150 WVDC.

Type CK: diameter as indicated; 5/32" thick. Tolerance −20 to +80%. Rated at 50 WVDC.

TYPE DA

Stock No.	Type	μF	EACH
43 A 1627	203	.02	.36
43 A 1628	503	.05	.81
43 A 1629	104	.1	1.35

TYPE DDA

43 A 1630	503	.05	.30
43 A 1631	104	.1	.60

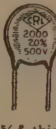
TYPE DM

43 A 1636	102*	.001	.90
43 A 1637	202†	.002	.90
43 A 1638	302†	.003	.90
43 A 1639	502†	.005	.90
43 A 1640	103†	.01	.90

TYPE CK

Stock No.	Type	μF	Dia.	EACH
43 A 1642	502	.005	⅜"	.21
43 A 1643	103	.01	⅜"	.21
43 A 1644	203	.02	9/16"	.21
43 A 1645	253	.025	9/16"	.21
43 A 1646	303	.03	9/16"	.21
43 A 1647	503	.05	⅝"	.30
43 A 1648	104	.1	⅝"	.60

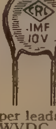
TYPE CE DISC CERAMICS



Designed for applications requi ing minimum capacity change a temperature varies from −55° to +85°C. Phenolic vacuum insu lation-impregnated with hig melting point wax. All 500 WVDC Power factor: 2% maximum at kHz. Leakage resistance: initia 10,000 megohms minimum; aft humidity, over 100 megohms. A 5/32" thick. 19/64" diameter, except †25/64", *19/ diameter. All have no. 22 tinned copper lead Av. shpg. wt., 1 oz.

Stock No.	Mfr's Type CE-	pF	EACH
43 A 0873	151	150	.18
43 A 0874	221	220	.18
43 A 0875	331	330	.18
43 A 0876	471	470	.18
43 A 0877	501	500	.18
43 A 0878	561	560	.18
43 A 0879	681†	680	.18
43 A 0889	751†	750	.18
43 A 0890	801†	800	.18
43 A 0891	102*	1000	.18

UK "ULTRA-KAP" MINIATURE DISC CAPACITORS



UK, UK10 and UK20 micro minia ture and miniature ceramic disc ca pacitors engineered specifically fo by-pass and coupling in transisto circuits. Extremely low dissipatio factor. Double Durez insulation wit high temperature wax impregnatio UK10 series primarily for portabl radios. Ultra-Kaps. #22 tinned copper leads. UK types, 3 WVDC; UK10 types, 1 WVDC. Tolerance −20 to +80%. guarantee minimum value. Av wt., 1 oz.

Stock No.	Mfr's Type	μF	Dia.	EACH
43 A 1701	UK-104	.1	3/16"	.34
43 A 1293	UK-224	.22	¼"	.24
43 A 1294	UK-474	.47	⅜"	.24
43 A 1295	UK-105	1.0	9/16"	.29
43 A 1296	UK-225	2.2	¾"	.34
43 A 1702	UK10-503	.05	¼"	.15
43 A 1703	UK10-104	.1	⅜"	.15
43 A 1704	UK10-204	.2	9/16"	.24
43 A 1705	UK10-474	.47	¾"	.34
43 A 1274	UK20-503	.05	13/32"	.15
43 A 1279	UK20-104	.1	19/32"	.17
43 A 1290	UK20-204	.2	27/32"	.31

Make Allied your headquarters for capacitors, or anything you need in electronics. Use this catalog as a handy reference guide to the world's largest stock in electronic equipment. Enjoy speedy, dependable one-order shipment.

Mica Capacitors and Capacitor Mounting Hardware

ELMENCO DM DIPPED "DUR-MICA" SILVERED MICA CAPACITORS

st widely used mica capacitor. Highest levels of reliability, rugged-s, and electrical excellence. Ideal combination of optimum quality small size. Special extra-tough epoxy coating resists extreme nidity and moisture. All are rated 500 WVDC, except †300 WVDC and 0 WVDC Operates in temperatures from −55°C to +150°C without ating Compact size of these capacitors makes them very suitable delay lines, computers, test equipment, missiles and other electronic olications wherein entire system performance depends on reliable operation of thousands of components. Subjected to "debugging" process to eliminate potential early failures. Capacitance drift ± .05%, (±.1 pF) (Char. F). Meet or exceed **MIL-C-5C** and **RETMA** specifications for mica capacitor. Tolerance, ±5%, except *±5 pF. See table below for exact capacitor dimensions. Average shpg. wt., 2 oz. **Units are dual-marked in both MIL and Commercial Type Numbers.**

tock No.	Mfr's Type	pF	Size, LxWxT	EACH
3 A 2354	DM-10-100J	10	.358x.387x.183	.31
3 A 2356	DM 10 150J	15	.358x.387x.183	.32
3 A 2358	DM-10-200J	20	.358x.387x.183	.22
3 A 2359	DM-10-220J	22	.358x.387x.183	.22
3 A 2361	DM 10-270J	27	.358x.387x.183	.22
3 A 2363	DM-10 330J	33	.358x.387x.183	.22
3 A 2367	DM-10-470J	47	.358x.387x.183	.23
3 A 2368	DM-10-500J	50	.363x.395x.188	.23
3 A 2372	DM-10-680J	68	.363x.395x.188	.25
3 A 2373	DM 10-750J	75	.363x.395x.188	.25
3 A 2376	DM-10 101J	100	.370x.405x.197	.26
3 A 2378	DM-10-121J	120	.370x.405x.197	.28
3 A 2380	DM-10-151J	150	.377x.415x.203	.32
3 A 2383	DM-10 201J	200	.384x.425x.212	.39
3 A 2384	DM-10-221J	220	.384x.425x.212	.40
3 A 2386	DM 10-251J	250	.391x.438x.220	.45
3 A 2388	DM-10-301J†	300	.391x.438x.220	.47
3 A 0716	DM 15-010D*	1	.446x.351x.163	.22
3 A 0717	DM-15 020D*	2	.446x.351x.163	.22
3 A 0718	DM-15-030D*	3	.446x.351x.163	.22
3 A 0719	DM-15 050D*	5	.446x.351x.163	.22
3 A 0720	DM-15-100J	10	.446x.351x.163	.22
3 A 0721	DM-15-120J	12	.448x.355x.166	.22
3 A 0722	DM-15-150J	15	.448x.355x.166	.22
3 A 0724	DM 15-200J	20	.448x.355x.166	.18
3 A 0725	DM-15-220J	22	.448x.355x 166	.18
3 A 0727	DM-15-270J	27	.448x.355x.166	.18
3 A 0728	DM-15 300J	30	.448x.355x.166	.18
3 A 0729	DM-15-330J	33	.448x.355x.166	.18
3 A 0731	DM-15 390J	39	.448x.355x.166	.18
3 A 0733	DM-15-470J	47	.451x.360x.175	.18
3 A 0734	DM-15-500J	50	.451x.360x.175	.18

Stock No.	Mfr's Type	pF	Size, LxWxT	EACH
43 A 0738	DM-15-680J	68	451x.360x.175	.18
43 A 0739	DM-15-750J	75	.451x 360x.175	.18
43 A 0740	DM-15-820J	82	.451x.360x.175	.18
43 A 0742	DM-15-101J	100	.451x 360x.175	.18
43 A 0744	DM 15-121J	120	.457x.372x.190	.20
43 A 0746	DM-15-151J	150	457x.372x.190	.21
43 A 0748	DM-15 181J	180	.457x.372x.190	.25
43 A 0749	DM-15-201J	200	.457x.372x.190	.25
43 A 0750	DM-15-221J	220	.470x.395x.220	.26
43 A 0752	DM-15-251J	250	.470x.395x.220	.28
43 A 0753	DM 15-271J	270	.470x.395x.220	.29
43 A 0754	DM-15-301J	300	.470x.395x.220	.31
43 A 0755	DM-15-331J	330	.470x.395x.220	.34
43 A 0756	DM 15-361J	360	.470x.395x.220	.36
43 A 0757	DM 15-391J	390	.470x.395x.220	.38
43 A 0759	DM-15-471J	470	.463x.371x.204	.42
43 A 0760	DM-15-501J	500	.463x.371x.204	.43
43 A 0761	DM-15-511J	510	.463x.371x.204	.45
43 A 0762	DM-15-561J†	560	.463x.371x.204	.45
43 A 0764	DM-15-681J†	680	.470x.378x.220	.53
43 A 0765	DM-15-751J†	750	.470x.378x.220	.57
43 A 0766	DM-15-821J†	820	.470x.378x.220	.62
43 A 0768	DM-15-102J§	1000	.487x.382x.238	.58
43 A 0770	DM 19-102J	1000	636x.490x.197	.41
43 A 0772	DM-19-122J	1200	.652x.506x.219	.47
43 A 0774	DM 19-152J	1500	.652x 506x.219	.56
43 A 0777	DM-19-202J	2000	.652x.506x 219	.68
43 A 0780	DM 19-252J	2500	668x 520x.240	.81
43 A 2404	DM-30-502J	5000	.765x 855x.263	1.15
43 A 2407	DM-30 622J	6200	773x.865x.287	1.35
43 A 0822	DM-30-103J	10,000	.783x.879x.323	2.12

ELMENCO CM MOLDED SILVERED MICAS

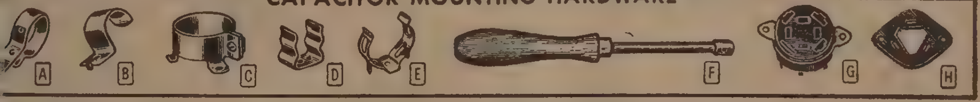
EL-MENCO
MADE IN USA

lded silvered mica capacitors offer excellent stability, dielectric ngth, longevity, and ruggedness. Meet **MIL-C-5, EIA, RS-153.** nolic cases. 500 WVDC, except *300 WVDC. Tolerance. ±5%. Middle letter in Type number is temperature coefficient. C: ±200 parts/ million/°C. D: ±10 parts. E: −20, +100 parts. Shpg. wt., 2 oz.

tock No.	Mfr's Type	pF	Size, LxWxT	EACH
3 A 0427	CM-15-C-050J	5	½x9/32x3/16	.22
3 A 0428	CM-15 C-100J	10	½x9/32x3/16	.22
3 A 0436	CM-15-C-150J	15	½x9/32x3/16	.22
3 A 0438	CM-15-C-200J	20	½x9/32x3/16	.18
3 A 0469	CM-15-E-330J	33	½x9/32x3/16	.18
3 A 0473	CM-15-E-470J	47	½x9/32x3/16	.18
3 A 0474	CM-15-E-500J	50	½x9/32x3/16	.18
3 A 0480	CM-15-E-680J	68	½x9/32x3/16	.18
3 A 0479	CM-15-E-820J	82	½x9/32x3/16	.18
3 A 0497	CM-15-E-101J	100	½x9/32x3/16	.18
3 A 0499	CM-15-E-121J	120	½x9/32x3/16	.20
3 A 0515	CM-15-E-151J	150	½x9/32x3/16	.21
3 A 0518	CM 15 E 201J	200	½x9/32x3/16	.25
3 A 0519	CM-15-E-221J	220	½x9/32x3/16	.26
3 A 0543	CM-15-E-251J	250	½x9/32x3/16	.28
3 A 0544	CM-15-E-271J	270	½x9/32x3/16	.29
3 A 0545	CM-15-E-301J	300	½x9/32x3/16	.31
3 A 0546	CM-15-E-331J	330	½x9/32x7/32	.34

Stock No.	Mfr's Type	pF	Size, LxWxT	EACH
43 A 0548	CM-15-E-391J	390	½x9/32x7/32	.38
43 A 0554	CM-15-E-471J	470	½x9/32x7/32	.42
43 A 0555	CM-15 E-501J	500	½x9/32x7/32	.44
43 A 0566	CM-20-D-681J	680	25/32x7/16x7/32	.29
43 A 0568	CM-20-D 821J	820	25/32x7/16x7/32	.32
43 A 0583	CM 20-E 102J	1000	25/32x7/16x7/32	.38
43 A 0587	CM 20-E-152J	1500	25/32x7/16x7/32	.50
43 A 0594	CM-20-E 202J	2000	25/32x7/16x7/32	.59
43 A 0422	CM 20 E 252J	2500	25/32x7/16x7/32	.71
43 A 0619	CM 20-E 332J	3300	25/32x7/16x7/32	.91
43 A 0621	CM-20-E 392J*	3900	25/32x7/16x7/32	.91
43 A 0623	CM-20-E-472J*	4700	25/32x7/16x7/32	1.09
43 A 0624	CM-20-E-502J*	5000	25/32x7/16x7/32	1.16
43 A 0639	CM-30-E-562J	5600	13/16x13/16x9/32	1.25
43 A 0641	CM-35-E-682J*	6800	13/16x13/16x11/32	1.31
43 A 0645	CM-35-E-103J*	10,000	13/16x13/16x11/32	1.81
43 A 0686	VCM-35-E-103J	10,000	13/16x13/16x11/32	2.12

CAPACITOR MOUNTING HARDWARE



ection of mounting hardware for capacitors subject to moderate or te vibration. Hold capacitors securely in position, positively eliminating any chance of wobble or strain on terminals or body. Straps are tinned steel; all others are cadmium-plated.

A TUBULAR STRAPS Wt., 1 oz.

ck No.	Dia.	EA.	Stock No.	Dia.	EA.
A 7962	5/8"	.09	43 A 7966	7/8"	.12
A 7963	11/16"	.09	43 A 7967	15/16"	.12
A 7964	¾"	.09	43 A 7968	1"	.12
A 7965	13/16"	.09	43 A 7969	1⅜"	.12

B "C" CLAMPS Wt., 1 oz.

A 7970	5/8-¾"	.12	43 A 7971	7/8-1"	.12

C MOUNTING RINGS Wt., 1 oz.

ock No.	Type	Size Dia.	EACH
A 7972	VR1	1—1 1/16"	.25
A 7973	VR5	1⅜ -1 7/16"	.25
A 7974	VR4	1½ -1 9/16"	.25
A 7975	VR8	2 —2 1/16"	.50
A 7976	VR10	2½"	.50
A 7977	VR12	3"	.60

D MOUNTING CLIPS Wt., 1 oz.

Stock No.	Type	Size Dia.	EACH
43 A 7978	21368-1	¾"	.12
43 A 7979	21368-2	1"	.12
43 A 7980	21368-3	1⅜"	.18

E UNIVERSAL CLIPS Wt., 2 oz.

43 A 7981	TH 13	⅜—7/16"	.12
43 A 7982	TH 15	½—9/16"	.12
43 A 7983	TH 17	5/8—11/16"	.12
43 A 7984	TH 19	¾—13/16"	.15
43 A 7985	TH 21	7/8—15/16"	15
43 A 7986	TH 23	1 —1 1/16"	.15
43 A 7987	TH 25	1⅜—1 7/16"	.15

F **43 A 7990. Mtg. Wrench.** For twist-prongs. Shpg. wt., 1 lb..............1.49

G MOUNTING SOCKETS Wt., 1 oz.

47 A 0335	2C5	1"	.52
47 A 0336	2C7	1⅜"	.76

H MOUNTING PLATES

*Phenolic †Metal. ‡Mount 1" dia. can over 1⅜" dia. hole. Shpg. wt., 1 oz.

Stock No.	Dia.	Stock No.	Dia.
43 A 7945	1"*	43 A 7948	1"†
43 A 7946	1⅜"*	43 A 7949	1⅜"†
43 A 7947	‡*	43 A 7950	‡†

EACH..................................09

KRAFT INSULATING SLEEVES

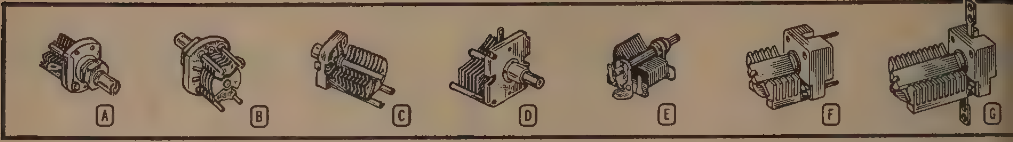
Offer positive insulation. Shpg. wt., 1 oz.

Stock No.	Dia.	Stock No.	Dia.
43 A 7510	¾x2"	43 A 7517	1⅜x2½"
43 A 7511	1x2"	43 A 7514	1⅜x3"
43 A 7515	1x2½"	43 A 7988	1⅜x3½"
43 A 7512	1x3"	43 A 7518	1⅜x4"
43 A 7513	1⅜x2"	43 A 7989	1⅜x4⅛"

EACH.................................. .09

Variable Capacitors and Noise Filters

E. F. JOHNSON CAPACITORS



TYPE M MINIATURE VARIABLES

Bridge-type stator terminal provides low inductance; oversize bearing, heavily anchored stator supports insure rigidity. ¾x⅝" panel mtg. space, ¼" hole. Slotted shaft takes 3/16" knob. 1250 V approx. peak break-down. Low-loss steatite insulation. Nickel-plated. 2 oz.

A SINGLE SECTION

Stock No.	Mfr's Type	Max. pF	Min. pF	No. of Plates	EA.
43 A 3758	160-102	5.0	1.5	5	.90
43 A 3759	160-104	8.7	1.8	9	.95
43 A 3760	160-107	14.2	2.3	15	1.00
43 A 3761	160-110	19.6	2.7	21	1.10
43 A 3766	160-130	32	3	28	1.20

B BUTTERFLY

Stock No.	Mfr's Type	Max. pF	Min. pF	No. of Plates	EA.
43 A 3763	160-205	5.1	1.8	10	1.30
43 A 3764	160-208	8.0	2.2	16	1.45
43 A 3765	160-211	10.8	2.7	22	1.60

C TYPE S VARIABLES

Compact and rugged; 850 V peak rating. Slotted hex-nut shaft. Panel space 29/32x25/32", 1 11/16" behind. Two 4-40 mtg. holes. 1 lb.

Stock No.	Mfr's Type	pF Max-Min	No. of Plates	EACH
43 A 3771	148-1	15-2.3	6	1.10
43 A 3772	148-2	25-2.6	10	1.15

C TYPE S VARIABLES (Cont'd)

Stock No.	Mfr's Type	pF Max-Min	No. of Plates	EACH
43 A 3773	148-3	35-2.9	14	1.20
43 A 3774	148-4	50-3.2	19	1.25
43 A 3776	148-6	100-4.5	38	1.45

TYPE L VARIABLES

Extremely stable; vibration- and shock-proof. 1500 V peak rating. Panel space 1⅜" sq., behind. ¼" shaft. Wt., 1 lb.

D SINGLE END PLATE

Stock No.	Mfr's Type	pF Max-Min	No. of Plates	EACH
43 A 3777	167-1	10-2.2	3	2.05
43 A 3778	167-2	25-2.9	7	2.20
43 A 3779	167-3	50-4.0	13	2.50
43 A 3780	167-4	75-5.2	19	2.70

E TYPE R VARIABLES

Extra-heavy rugged construction. Panel or base mtg Panel space 1 11/16x1⅝", up to 2⅛" behind. 1200 V peak. Shpg. wt., 1 lb.

Stock No.	Mfr's Type	pF Max-Min	No. of Plates	EACH
43 A 3754	149-3	50 5.9	7	2.95
43 A 3756	149-5	102-7.1	14	3.25
43 A 3757	149-6	140-8.0	19	3.50

TYPE U SUBMINIATURE VARIABLES

Sub-miniature, air variable capacitors cu
costs, improve performance, and save valuabl
space in compact equipment. Single sectio
types. High Q. Low temperature coefficient
13/64" panel space, up to ¾" behind. 650 V pea
breakdown. Screwdriver adjustment. ‡5/3
terminals, †5/16". Av. wt., 4 oz.

F PRINTED CIRCUIT MOUNTING‡

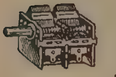
Stock No.	Mfr's Type	pF Max-Min	No. of Plates	EACH
43 A 4523	189-501-5	4.2-1.2	4	.56
43 A 4524	189-502-5	6.7-1.3	6	.58
43 A 4525	189-503-5	9.2-1.4	8	.56
43 A 4526	189-504-5	11.6 1.5	10	.58
43 A 4527	189-505 5	14.1-1.7	12	.60
43 A 4528	189-506 5	16.7-1.8	14	.62

G TWO-HOLE MOUNTING†

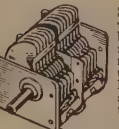
Stock No.	Mfr's Type	pF Max-Min	No. of Plates	EACH
43 A 4548	189 501-4	4.2-1.2	4	.60
43 A 4549	189 502-4	6.7-1.3	6	.62
43 A 4589	189-503-4	9.2-1.4	8	.60
43 A 4591	189-504-4	11.6-1.5	10	.62
43 A 4592	189-505-4	14.1-1.7	12	.64
43 A 4593	189-506-4	16.7-1.8	14	.66

RECEIVER-TYPE CAPACITORS AND ACCESSORIES

TRF CAPACITORS



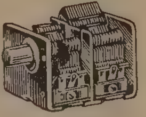
2-Gang. For use in superhets without RF stage or in 2-stage TRF receivers. Each section has 29 plates. Range, 15.5 to 467.8 pF, each section. Counter-clockwise rotation increases capacity. With trimmers. End plates slotted for easy tracking adjustments. Spring brass wipers. Take series padder for oscillator use. ⅜" dia. shaft. Requires the use of an extender in order to convert to ¼" shaft. See coil and IF. section of this catalog for coils. Size, 1⅝x1 13/16x2 3/16". Shpg. wt., 8 oz.
43 A 3528..............................3.00



2- and 3-Gang Capacitors. Compact TRF variable capacitors. Have trimmers on side of frame. Outer rotor plates are slotted for tracking adjustment. Tapped holes in frame provide secure mounting. Range: 12 to 367 pF. Shaft diameter, ⅜". Size of 2-gang: 2 3/16x 1 13/16x1⅝". Size of 3-gang: 3 3/16x1 13/16x1⅝". Av. shpg. wt., 6 oz.
43 A 3521. 2-Gang..................3.22
43 A 3522. 3-Gang..................4.95

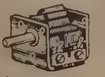
Allied has the world's largest selection of electronic components for experimenters, hobbyists, and builders. Use the handy, complete index in the back of this catalog.

SUPERHET CAPACITOR



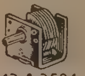
2-Section Superhet Variable. 19-plate oscillator section with 172.6 max.—10.6 min. pF; has one 2-17 pF trimmer. 27-plate RF section with 434 max. to 14.5 min. pF; has one 2-17 pF trimmer. Capacity increases with CCW rotation. Overall size, 1⅝x1 13/16x2 3/16". Shaft, ¼x¾". Shpg. wt., 8 oz.
43 A 3529..............................2.50

MIDGET SUPERHET AND TRF TYPES



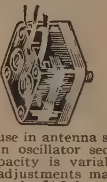
Midget Superhet. Miniature size without sacrifice of performance makes these 2-gang variables perfect for portable and midget sets. Capacity: RF sec., 14.5 to 368 pF, 27 plates; osc. sec., 11.6 to 136.6 pF, 15 plates. Cap. increases CCW. 455 kHz IF. Trimmers. 1 11/16x1½x1 5/16". Shpg. wt., 6 oz.
43 A 3523 ....2.08

Miniature Superhet. RF section is 10.8 pF to 232.4 pF. Oscillator section is 8.5 pF to 106.3 pF. 1 5/16x1⅜x1 3/16". Shpg. wt., 5 oz.
43 A 2605..............................2.50



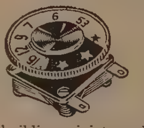
Midget TRF. Compact, 33-plate, single-section capacitor. Variable from 15 to 409 pF. Capacity increases clockwise. 1 3/16" deep, 1⅜" wide, 1 5/16" high. ¼" diameter shaft, 1" long. Shpg. wt., 5 oz.
43 A 3524..............................1.30

MINIATURE 2-GANG CAPACITOR



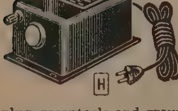
For up-to-date miniature tub
or transistor circuitry; als
used as a direct replacemen
for most units used in curren
pocket-size transistor re
ceivers. Fits both foreign an
domestic models. Completel
enclosed in clear polyethylen
plastic case. Plates rotat
180°. Maximum capacity fo
use in antenna section is 148.1 pF, maximur
in oscillator section, 65.2 pF. Trimmer ca
pacity is variable to over 6 pF. Trimme
adjustments may be made through case. 5/
sq. by 7/16" deep. Shpg. wt., 4 oz.
43 A 7092..............................1.5

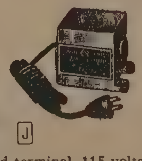
MINIATURE SINGLE SECTION TUNING CAPACITOR WITH DIAL



Miniature single-gan
capacitor for use in TRF
broadcast band and e
perimental receiver
transmitters, signal ger
erators, wave traps an
many other units. Idea
for transistor circuits. A
excellent device for th
hobbyist or experimente
building miniature electronic instruments. C
pacity variable from 10 to 365 pF. Has 1
diameter, clear plastic tuning dial with mille
edges. Calibrations in silver numerals, rea
from 530 to 1600 kHz. Full 180° rotatio
Size, 1" sq. by ½" deep, ¼" shaft. 5 o
43 A 7091..............................6

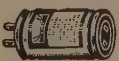
CORNELL-DUBILIER PLUG-IN NOISE FILTERS





H Type IF-18. Effective capacitive inductive type of filter for suppression of severe interference. For use wherever ventilating or air conditioning units, washing machine or machine tools interfere with radio-TV reception. Bakelite case, 6x3¾x2½", line cord, plug, receptacle and ground terminal. 115 volts, AC-DC, 5 amps. 4 lbs.
43 A 3564..............................7.67

J Type IF-19. Smaller than above, yet has as much attenuation. Has line cord, plug, receptacle, and ground terminal. For 115 volts, AC-DC. Rated 5 amps. 4x2¼x2⅞". Shpg. wt., 3 lbs.
43 A 3565..............................7.30

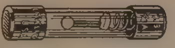


Type IF-4. Efficient plug-in, cylindrical filter fo
suppression of medium-intensity interference pr
duced by fluorescent lighting fixtures, electric shaver
fans, food mixer, billing machines and similar device
Well suited for use with small receivers such as AC
DC midget sets, portable TV sets, etc. Filter plugs directly into wal
appliance or receiver plugs into filter. Rated at 115 volts, AC-DC,
amps. 1⅛" dia., 2" long. Shpg. wt., 5 oz.
43 A 3568..............................1.0

Type IF-6. Convenient plug-in filter designed for elimination of mod
erate interference. Especially suitable for suppression of interferenc
caused by fluorescent lights, electric shavers and similar devices. Fo
installation as an accessory of a portable or semi-permanent nature o
radios, TVs, etc. Connects between power line and appliance or betwee
power line and receiver. Rated at 115 volts, AC. 5 amps. 1⅜" dia., 2
long. Shpg. wt., 6 oz.
43 A 3569..............................1.8

Littelfuse Fuses and Mallory Circuit Breakers

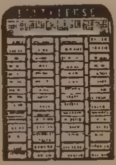
TYPE 3AG SLO-BLO FUSES



; 313000. Have high time-lag to
itand heavy surges, yet blow quickly
hort-circuits. Excellent where high
tive or capacitative surges or heavy
ng currents are present. Blowing specifications: 110% of
g. 4 hrs. minimum; 135%, 1 hour maximum; 200%, 5 seconds
num. Employ anti-fatigue construction with spring and
or. Fuses rated up to 5 amps are U.L. Component Program-
gnized. All are rated at 125 volts maximum except *32 volts
mum. Size, 1¼x¼". 2 oz. 5 FUSES PER PACKAGE.

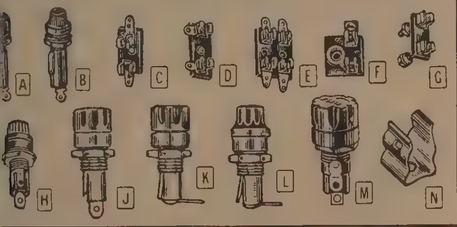
eres	Stock No.	5 PER PACKAGE	Amperes	Stock No.	5 PER PACKAGE
00	57 A 3073	1.68	1-2/10	57 A 3643	1.14
32	57 A 3074	1.68	1-1/4	57 A 3090	1.14
16	57 A 3075	1.23	1-1/2	57 A 3091	1.14
10	57 A 3076	1.23	1-6/10	57 A 3092	1.14
8	57 A 3077	1.23	2	57 A 3093	1.14
100	57 A 3078	1.23	2-1/2	57 A 3094	.90
.75	57 A 3079	1.23	2-8/10	57 A 3099	.90
16	57 A 3080	1.23	3	57 A 3095	.90
10	57 A 3081	1.23	3-2/10	57 A 3096	.90
4	57 A 3082	1.23	4	57 A 3097	.90
10	57 A 3083	1.23	5	57 A 3098	.90
8	57 A 3084	1.23	6-1/4*	57 A 3100	.90
10	57 A 3641	1.23	7*	57 A 3644	.90
2	57 A 3085	1.23	8*	57 A 3101	.90
10	57 A 3086	1.23	10*	57 A 3102	.90
10	57 A 3642	1.23	15*	57 A 3103	.90
4	57 A 3087	1.23	20*	57 A 3104	.90
10	57 A 3088	1.23	25*	57 A 3105	.90
	57 A 3089	1.23	30*	57 A 3106	.90

FUSEMASTER RACK ASSORTMENT



tic rack displays 300 fuses. Includes 100
s, inventory control backboard, pressure-
itive blank inventory labels, mounting
ws. Includes: TYPE 3AG—ten ¼-amp; ten
mp, five 1-amp, five 2-amp, five 5-amp.
PE 3AG SLO-BLO—ten ¼-amp, five ½-
, five 1-amp, five 2-amp, five 3-amp, ten 5-
. TYPE C—ten 3/10-amp. TYPE N—five
-amp, five 4/10-amp, five ½-amp.
3071. Shpg. wt., 2 lbs. 16.57

FUSE HOLDERS



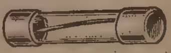
INDUSTRIAL—FOR 3AG AND 3AB Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Fig.	Description	EACH
A 3000	341001	A	Screw slot	.57
A 3001	342001	B	Thumb knob	.57
A 3002	342012	H	Extractor post	.41
A 3003	342014	J	Miniature fuse post	.41
A 3004	342004	K	Miniature fuse post	.48
A 3005	342022	L	Miniature fuse post	.48
A 3006	350218	D	Single fuse mounting	.19
A 3007	353001	G	Panel-type mounting	.56
A 3008	356001	C	Screw terminals	.38
A 3009	357001	C	Lug terminals	.19
A 3010	357002	E	Double fuse mounting	.35
A 3238	101001	N	Phosphor bronze clips	.04
FOR 8AG				
A 3013	372001	B	Thumb knob	.57
A 3014	383002	F	"Meter-back" mounting	.37
A 3015	387001	C	Lug terminals	.19
A 3016	387002	E	Double fuse mounting	.35

MILITARY—MIL-F-19207A (*RF Shield)

Stock No.	Mfr's Type	MIL No.	Fig.	Post Description	EACH
A 3677	342025	FHN20G	K	3AG miniature	1.36
A 3676	342024	FHN26G	H	3AG miniature	1.32
A 3052	340255	FHN26G*	H	3AG miniature	4.77
A 3678	342021	FHN26W	M	3AG waterproof	3.20
A 3680	372003	FHN31G	B	8AG extractor	2.65

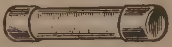
TYPE 3AG STANDARD FUSES



Series 312000. Quick-acting standard fuses. Ideal for radios, amplifiers, transmitters, etc. Diagonal alignment of fuse element assures accurate blowing even when element is expanded by heat. Completely unaffected by high operating temperatures. Blowing specifications: 110% of rating, 4 hours min.; 135%, 1-hour max.; 200%, 10 sec. max. U.L. Component Program-Recognized. Rated at 250 volts, maximum, except *125 volts and †32 volts. Size, 1¼x¼". Shpg. wt., 2 oz. 5 FUSES PER PKG.

Amperes	Stock No.	5 PER PACKAGE	Amperes	Stock No.	5 PER PACKAGE
1/100	57 A 3600	2.25	2	57 A 3119	.39
1/32	57 A 3601	1.98	2-1/2	57 A 3657	.39
1/16	57 A 3107	.87	3	57 A 3120	.39
1/8	57 A 3108	.87	4	57 A 3121	.48
15/100	57 A 3654	.87	5	57 A 3122	.48
3/16	57 A 3110	.87	6	57 A 3125	.48
2/10	57 A 3656	.87	8*	57 A 3126	.69
1/4	57 A 3111	.57	4†	57 A 3703	.39
3/10	57 A 3112	.57	5†	57 A 3704	.28
3/8	57 A 3113	.57	6†	57 A 3709	.28
1/2	57 A 3114	.57	7-1/2†	57 A 3710	.28
6/10	57 A 3115	.57	10†	57 A 3705	.28
3/4	57 A 3116	.57	15†	57 A 3706	.28
1	57 A 3117	.39	25†	57 A 3707	.28
11/2	57 A 3118	.39	30†	57 A 3708	.28

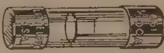
TYPE 3AB MEDIUM-LAG FUSES



Series 314000. Steatite enclosed, arc-quenching, powder-filled fuses. Smallest U.L. Component Program-Recognized units in these high ratings. Medium-time-lag. Shatter-proofed against quick shorts. For amplifiers, etc. Maximum volts 250, except *125. 1¼x¼". Wt., 2 oz. 5 PER PKG.

Amperes	Stock No.	5 PER PACKAGE	Amperes	Stock No.	5 PER PACKAGE
1/8	57 A 3711	.78	5	57 A 3719	.69
1/4	57 A 3712	.78	6	57 A 3720	.69
3/8	57 A 3713	.78	8	57 A 3721	.69
1/2	57 A 3714	.78	10	57 A 3722	.69
3/4	57 A 3715	.78	12	57 A 3723	.75
1	57 A 3716	.75	15	57 A 3724	.75
2	57 A 3717	.75	20*	57 A 3725	.75
3	57 A 3718	.75	25*	57 A 3726	.93

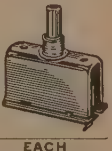
TYPE 8AG FAST-ACTION INSTRUMENT FUSES



Series 361000. Reliable efficiency and high speed action of these fuses make them ideal for protecting delicate equipment—ammeters, wattmeters, radio "B" circuits, small rectifier and power tubes. 250-volt maximum except *125 volts. 1x1¼". Av. shpg. wt., 2 oz. 5 PER PKG.

Amperes	Stock No.	5 PER PACKAGE	Amperes	Stock No.	5 PER PACKAGE
1/500	57 A 3214	6.00	3/8	57 A 3221	.57
1/200	57 A 3215	2.52	1/2	57 A 3222	.57
1/100	57 A 3216	2.25	1	57 A 3224	.39
1/32	57 A 3217	1.98	1½	57 A 3225	.39
1/16	57 A 3218	1.23	2	57 A 3235	.39
1/10	57 A 3658	.87	3	57 A 3236	.39
1/8	57 A 3219	.87	5*	57 A 3237	.39
1/4	57 A 3220	.57	....	.. ..	... .

MALLORY CIRCUIT BREAKERS

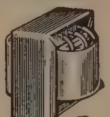


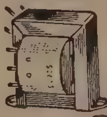
Stack-type circuit breakers available in ratings from 0.5 to 7.0 amperes to cover a wide variety of applications. Precision engineered, have "anti-cheat" reset action; non-cycling, constant pressure. Temperature compensated. Tripping time is within 10 seconds. Bushing mount. *Heavy-duty contacts. Shpg. wt., 3 oz.

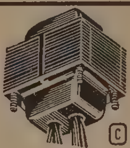
Stock No.	Type CBB-	A	Stock No.	Type CBB-	A	EACH		
						1-24	25-49	50-99
57 A 3574	050	0.5	57 A 3579	200	2.0	.95	.84	.73
57 A 3575	075	0.75	57 A 3580	225	2.25	.95	.84	.73
57 A 3576	100	1.0	57 A 3581	250	2.5	.95	.84	.73
57 A 3577	150	1.5	57 A 3582	275	2.75	.95	.84	.73
57 A 3578	175	1.75	57 A 3583	300	3.0	.95	.84	.73
57 A 3584	325*	3.25	57 A 3588	450*	4.5	1.02	.91	.79
57 A 3585	350*	3.5	57 A 3589	500*	5.0	1.02	.91	.79
57 A 3586	375*	3.75	57 A 3590	600*	6.0	1.02	.91	.79
57 A 3587	400*	4.0	57 A 3591	700*	7.0	1.02	.91	.79

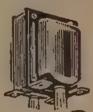
knight Transformers—Exclusive at Allied

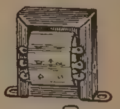
Knight Low-Cost Transformers Provide Dependability and Big Savings

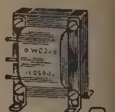

A


B


C


D


E


F

POWER TRANSFORMERS

For radio replacement use, etc. Fully shielded. Heavy-duty 5" coded leads. All plate windings are center-tapped, except *half-wave type; for 6AX5, 6X4, 6X5 and similar 6 3 V. filament rectifiers and for selenium rectifier. CT 6.3-V winding. †Not CT. ‡Static shield. #60 Hz only. **22.5 volt at 5 amperes winding. For 110-120 volt, 50-60 Hz primaries.

Stock No.	Fig.	Plate		5 V at A	6.3 V at A	Mtg. Ctrs.	Wt., Lbs.	EACH
		VCT	mA					
54 A 3710	A	115*	15	....	0.6†‡	2⅜"	1	5.30
54 A 1410	B	125*	15	.....	0.6†	2"	¼	2.52
54 A 1411	A	125*	50	....	2†	3⅛"	1½	4.07
54 A 3708	C#	135*	200	.....	5.5‡	2¹³⁄₁₆x2¼"	3½	9.21
54 A 4720	D	230	40	.....	1.5	1¾x1⅝"	1½	5.57
54 A 2008	B	250	25	.....	1.0†	2⅜"	1	3.02
54 A 2318	B	380*	20	.....	.....	2⅜"	1½	3.90
54 A 3706	D	440	50	**	0.6†	2x1¹¹⁄₁₆"	2¼	7.47
54 A 1461	D	460	50	.....	2.5†	2x1¾"	2¾	5.44
54 A 2502	C	460	50	..	2.5†	2½x2"	2¾	5.44
54 A 2034	C	480	40	2	2	2½x2"	2¾	5.89
54 A 2503	C	480	55	2	2	2½x2"	3	5.66
54 A 2504	C	480	70	.....	3†	2½x2"	3	6.23
54 A 1427	D	480	40	2	2	2x1¹¹⁄₁₆"	2¾	5.89
54 A 1462	D	480	55	2	2	2x1¾"	3	6.21
54 A 1463	D	480	70	.....	3†	2x1⅞"	3	6.23
54 A 2506	C	500	70	2.0	2.5	2½x2"	3½	7.18
54 A 2551	D	500	40	.....	2	1²⁵⁄₃₂x1⅞"	2¼	6.00
54 A 1464	D	500	70	2	2.5	2x2⅛"	3½	7.18
54 A 1465	D	520	90	.....	4†	2¼x1¹⁄₁₆"	3¾	7.26
54 A 1444	C	520	90	2	3	2¹³⁄₁₆x2¼"	4	7.47
54 A 1412	D	520	90	2	3	2¼x2¼"	4	7.47
54 A 1466	D	540	120	3	3.5	2½x2¼"	5	10.47
54 A 3704	D	600	65	.....	2.7‡	2x1¹¹⁄₁₆"	2¾	6.78
54 A 1468	C	600	70	2	3	2½x2"	3¾	8.94
54 A 1469	C	600	120	3	5	3⅛x2½"	6	10.97
54 A 4725	D	600	70	2	3	2x2³⁄₁₆"	3¾	8.94
54 A 2526	D	600	120	3	5	2½x2⁹⁄₁₆"	6	10.97
54 A 3703	D	650	150	3	5†	2½x2⁹⁄₁₆"	6	11.08
54 A 1413	D	650	40	2	2	2x1¹¹⁄₁₆"	2½	6.12
54 A 4730	D	650	150	3	5	2½x3"	7½	11.08
54 A 2042	C	650	70	3	3.5	2½x2"	4¼	6.00
54 A 1428	D	650	70	3	3.5	2x2¾"	4¼	6.00
54 A 1471	C	650	150	3	5	3⅛x2½"	7½	11.08
54 A 1472	D	680	70	2	2.5	2¼x2³⁄₁₆"	4	8.45
54 A 2043	C	700	90	3	3.5	2¹³⁄₁₆x2¼"	4½	8.45
54 A 2044	C	700	120	3	4.7	3⅛x2½"	5¾	9.92
54 A 1430	D	700	120	3	4.7	2½x2¹¹⁄₁₆"	5¾	9.92
54 A 2535	D	700	200	3	6	3x2¹³⁄₁₆"	8	14.92
54 A 1414	D	800	200	3	5	3x2¹³⁄₁₆"	7¾	13.36
54 A 2548	D	800	250	4	5	3x3⁵⁄₁₆"	10¼	15.76

A STANDARD OUTPUT TRANSFORMERS

Couple plate of output tube to speaker voice coil. For class A amplifiers. *Fig. F. Shpg. wt. ¾ lb.

Stock No.	Primary		Sec. Imp.	Audio Watts	Size H x W x D	EACH
	Imp.	mA				
54 A 1401	2000	50	3.2	3	1¼x2⅛x1¼"	1.58
54 A 2065	2000	50	3.2	5	1⅜x2⅜x1⅜"	1.58
54 A 1402	2000	60	4	5	1⅜x2⅜x1⅜"	1.89
54 A 2063	2500	50	3.2	3	1¼x2⅛x1⅜"	1.97
54 A 2064	5000	40	3.2	3	1¼x2⅛x1⅜"	1.97
54 A 1403	5000	40	4	5	1⅜x2⅜x1⅜"	1.68
54 A 1446	*5000	40	6-8	10	2⅜x2⅞x1⅞"	2.64
54 A 1447	7000	30	4	5	1⅜x2⅜x1⅜"	1.79
54 A 1448	10,000	30	4	5	1⅜x2⅜x1⅜"	1.74
54 A 1449	25,000	5	4	5	1⅜x2⅜x1⅜"	2.08

Transformers listed on these pages are the most popular types manufactured by Knight. Built to Allied's own rigid standards of quality and performance, they carry a one-full-year warranty against defects in workmanship. Allied is your exclusive supplier for Knight transformers. When you order Knight transformers you get these extra Allied advantages: same-day shipment, complete one-order purchasing and money-saving prices.

CONTROL TRANSFORMERS

For high-speed automatic equipment, relays, pilot lamps, solenoid small motors. May be used in high current, low voltage powe supplies. Secondary has two identical windings which permit serie or parallel operation. Primary for 115 or 230 volts, 50-60 Hz.

Stock No.	Fig.	Parallel Sec.		Series Sec.		Size Hx Wx D	Wt., Lbs.	EAC
		Volts	Amps	Volts	Amps			
54 A 2351	E	6	2	12	1	2⅜x2⅞x1¾"	1	3.70
54 A 2352	E	6	4	12	2	2¾x3⅛x2"	1¾	4.50
54 A 2353	E	12	4	24	2	3⅛x3⅝x2¼"	2½	5.44
54 A 2354	F	12	8	24	4	3⅜x2⅞x3"	4½	8.87

F MULTI-TAP SELENIUM RECTIFIER TRANSFORMERS

Tapped primary and additional tapped winding permit a variety output voltages in addition to those shown. 117 V, 50-60 Hz pr maries. Include wiring diagram. *Capacitive load.

Stock No.	Rect. Circuit	Range of AC Volts	Max DC Output*		Size Hx Wx D	Wt., Lbs.	EAC
			Volts	Amps			
54 A 2331	CT	11.5 to 29.5	13.6	2			
	Bridge	11.0 to 28.5	30.0	1.25	3x2½x2¾"	2¾	5.8
54 A 2332	CT	12.0 to 29.6	14.5	4			
	Bridge	12.0 to 29.6	33.0	2	3⅜x2⅞x3"	4½	8.
54 A 2333	CT	11.5 to 29.0	14.5	8			
	Bridge	11.5 to 29.0	32.2	4	3¾x3⅛x3½"	6¼	10.2
54 A 2334	CT	12.0 to 29.5	14.2	12			
	Bridge	12.0 to 29.5	32.0	6	4⅛x3½x3⅞"	9	14.5
54 A 2335	CT	12.0 to 29.0	14.5	15			
	Bridge	12.0 to 29.0	32.0	8	4⅝x3¾x5"	13	18.5

VARIABLE VOLTAGE AND ISOLATION TRANSFORMERS

Output, 115 V except *105, 115, 125. 50-60 Hz. 6′ cord, plug.

Stock No.	Fig.	Watts	Input Volts	Size Hx Wx D	Mtg. Centers	Wt., Lbs.	EAC
54 A 2080	G	150	90-250	4⅝x3⅞x5½"	3x3⅛"	9½	19.3
54 A 1490	G	100	105-125	4⅝x3⅞x4¾"	3x2⁹⁄₁₆"	7½	16.8
54 A 2563	H	*350	117	5½x4⅝x5¾"	3½x3⅞"	16	28.1

H ISOLATION TRANSFORMERS

Reduce shock hazard by isolating equipment from AC power line Prevent "hot chassis" when servicing AC-DC equipment. For 11 V, 50-60 Hz. With 6-ft. cord, plug, standard AC receptacle.

Stock No.	Watts	Size, Hx Wx D	Wt., Lbs.	EACH
54 A 1426	50	3⅝x3x3⅜"	3½	8.36
54 A 2086	100	4⅜x3⅝x4"	7	14.76
54 A 2087	250	4⅝x3⅞x4⅝"	12½	25.84

230 TO 115-VOLT STEP-DOWN AUTOTRANSFORMERS

Well-built step-down transformers for reducing 220-250 volts, 50-6 Hz to 110-125 volts. For operating tape recorders, radios, ampli fiers, household appliances, etc. Shielded construction. With 8-f cord and plug. Standard AC receptacle on case. *No cord.

Stock No.	Fig.	Volt-Amps	Size, Hx Wx D	Wt., Lbs.	EACH
54 A 1494	J	8	3¾x1¹¹⁄₁₆"	1	4.01
54 A 2555	A*	20	2x3¼x2"	1¼	3.49
54 A 2556	A*	40	2⁵⁄₁₆x3⅝x2⅛"	1¾	3.90
54 A 2510	H	80	3⅝x3x3¼"	3¼	8.41
54 A 2557	H	100	3½x2⅞x3⅜"	4	8.94
54 A 2511	H	150	4x3⅜x3⅝"	4¾	10.70
54 A 2512	H	250	4⅝x3⅞x4¼"	7¾	13.94
54 A 2513	H	500	4⅝x3⅞x4¾"	11	19.15
54 A 1434	H	750	5½x4⅝x5"	13¾	24.12
54 A 1432	H	1000	5½x4⅝x5¼"	14¾	31.66
54 A 1435	H	1500	6x4½x5⅝"	20	35.41
54 A 1433	H	2000	6x4½x6⅜"	25	40.07

H 115 TO 230-VOLT STEP-UP AUTOTRANSFORMERS

Increase 110-125 volts, 50-60 Hz, to 220-250 volts. Shielded co struction. 8′ cord, plug. Std. AC receptacle on case.

Stock No.	Volt-Amps	Size, Hx Wx D	Wt., Lbs.	EACH
54 A 2558	80	3⅝x3x3¼"	3¼	8.41
54 A 2559	150	4x3⅜x3⅝"	4¾	10.38
54 A 2560	500	4⅝x3⅞x4¾"	10¼	19.13

Depend on Allied for All Your Transformer Needs

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knight

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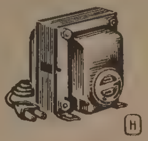
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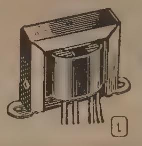
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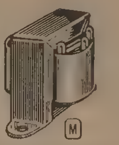
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Money-Saving
Knight Trans-
formers Are
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FILTER AND SMOOTHING CHOKES

'hokes are rated at 10 volts, 60 Hz with maximum DC in winding. ngs have −15%, +50% tolerance. Insulation withstands 1500 volts, except †2000, ‡3000.

ock No.	Fig.	H	mA	Res., Ohms	Mtg. Centers	Wt., Lbs.	EACH
2341	F	.01	12,500	.11	3⅜x2⅜"	6½	10.74
2342	F	.025	4000	.425	2¾x2⅛"	3½	7.06
2343	F	.035	2000	.75	2⅛x2"	2¾	4.03
4700	F	.8/.02	2500/5000	.61/.155	2½x3¹⁄₁₆"	6¾	12.17
4701	F	.3/.075	1000/2000	3/.75	2¼x2¹¹⁄₁₆"	4¾	8.77
4702	A	.33	600	10	2¹³⁄₁₆"	1½	3.33
4703	A	.70	290	30	2⅜"	¾	1.86
1479	A	†1.0	300	40	3⅛"	1¼	3.35
1480	A	‡1.5	10	95	1¾"	¼	1.40
1406	A	1.5	200	60	2⅜"	¾	1.91
1481	A	2.0	200	65	3⅛"	1¾	3.26
3990	A	2.0	15	70	1¾"	½	1.76
1482	A	2.3	150	60	2¹³⁄₁₆"	1	2.66
2344	A	†2.5	130	100	2¹³⁄₁₆"	1	2.58
1483	A	†3.0	150	97	3⅛"	1¾	3.08
1407	A	3.5	50	200	2⅜"	¾	1.85
3992	A	5.0	65	330	2⅜"	¾	2.65
2348	K	5.0	100	300	1½x2⅜"	2½	3.97
2135	A	5.5	50	330	2"	½	1.53
4704	A	6.0	200	150	3⁹⁄₁₆"	2½	4.38
1408	A	7.0	50	550	2"	½	1.53
1485	A	8.0	85	260	2¹³⁄₁₆"	1½	2.74
2136	A	8.5	50	400	2⅜"	¾	1.66
3993	A	9.0	125	250	3⅛"	1½	3.63
4706	D	†10.0	200	150	2¼x2⅜"	4½	8.64
4707	A	10.0	90	270	2¹³⁄₁₆"	1½	3.10
2139	A	10.5	110	220	3⁹⁄₁₆"	2¼	3.79
1486	D	12/8/4	100/150/200	145	2x1¾"	2¾	5.30
2137	A	16.0	50	550	2¹³⁄₁₆"	1	2.29
1489	A	20.0	15	900	2⅜"	¾	2.39
2349	A	35.0	15	1600	2"	½	1.93
2350	A	‡350.0	5	5500	2¹³⁄₁₆"	1	4.02

HIGH-CURRENT CHOKES

3996	F	.01	8.0 amps	.15	3⅛x2¼"	5½	9.26

LOW-VOLTAGE RECTIFIER TRANSFORMERS

ilicon diode and transistor DC voltages with full-wave or bridge rec-. 1500 volt test. Primaries, 115 V. Primaries of Fig. L types are ed. All are Fig. L except *Fig F and †Fig. D.

tock No.	Secondary		Size H x W x D	Mtg. Ctrs.	Wt., Lbs.	EACH
	Volts AC	Amps				
A 4731	10-20 CT 40 CT	035	1⁷⁄₁₆x2⅜x1⅜"	2"	½	3.97
A 4732	10-20 CT-40 CT	100	1¹¹⁄₁₆x2¹³⁄₁₆x1⅝"	2⅜"	¾	4.62
A 4733	10-20 CT 40 CT	300	2⁵⁄₁₆x3¹¹⁄₁₆x2"	3⅛"	1½	5.39
A 4734	10-20 CT-40 CT	750	2⅝x4x2⅜"	3⁹⁄₁₆"	2½	6.85
A 4735	10-20 CT-40 CT	†1	3⅛x2⅝x3⅛"	2x2¼"	3¼	10.20
A 4736	0-17-18	*3	3⅛x2⁹⁄₁₆x2⅞"	2x2⅜"	3¼	7.53
A 4737	0-17-18	*6	3¹³⁄₁₆x3³⁄₁₆x3¼"	2½x2⅝"	5¾	10.20
A 4738	0-6 5-13-19 5-26	*3	3½x2⅞x2⅜"	2¼x2⅛"	3½	8.17
A 4739	0-24-27-30-33-36	*3	3¹³⁄₁₆x3³⁄₁₆x3¼"	2⅛x2⅝"	5¾	11.96
A 4740	0-24-27-30-33-36	*8	4⅝x3¹³⁄₁₆x3⅞"	3x3¼"	10¾	18.57

INIATURE INTERCOM/TRANSCEIVER TRANSFORMERS

nsceiver and intercom transformers designed to replace original s. *Transceiver input, mike or plate to grid; has 4.5% primary tap in B + filter network for hum reduction. †Intercom input, voice to grid. §Line to voice coil. Av. shpg. wt., ½ lb.

tock No.	Fig.	Impedance, Ohms		Audio Watts	Mtg. Ctrs.	EACH
		Primary	Secondary			
A 1491	A	*200/5000	60,000	5	2⅜"	3.08
A 1492	A	†4	25,000	....	2"	2.39
A 1493	M	§45/50	3-4, 6-8	3	2"	2.13

70.7-VOLT LINE-TO-VOICE-COIL TRANSFORMERS

ondaries: 4, 8, 16 ohms, except *3.2-4, 6-8. †High-fidelity.

tock No.	Fig.	Watt Taps	Max. Watt	Size	Wt., Lbs.	EA.
A 1440	M	2, 1, .5	*2	1³⁄₁₆x2¹⁄₁₆x1¼"	¼	2.87
A 2081	M	5, 2.5, 1.25, .62, .31	*5	1⅜x2⅜x1½"	¾	2.82
A 1422	E	8, 4, 2, 1, 0 5	8	2x2⅜x1⅝"	¾	3.73
A 2077	M	10, 5, 2.5, 1.25, .62	10	1⅝x2¹³⁄₁₆x1⅝"	¾	3.54
A 2078	E	18, 9, 4.5, 2.25, 1.12, .56	18	2⅜x2⅞x1⅞"	1¾	4.36
A 1450	E	16, 8, 4, 2, 1, 0.5	16	2¾x3⅛x2¼"	2	5.58
A 2079	M	24, 12, 6, 3, 1.5, .75	24	2¼x3¹¹⁄₁₆x2¼"	1¾	5.30
A 1441	M	5, 2.5, 1.25, .625, .31	†5	1⅝x2¹³⁄₁₆x1⅝"	¾	3.74

Compare specifications and prices. Allied's own Knight components always give you more for your money!

A AUDIO TRANSFORMERS

*Single plate to P-P grid except, †single plate to single grid, ‡single or P-P plate to P-P grids, §P-P plate to voice coil. ½x½" cores. Av. shpg. wt., 2 lbs.

Stock No.	Impedance, Ohms		Turns Ratio	Max. mA	Size HxWxD	EACH
	Primary	Secondary				
54 A 2062	†7000	20,000	1:3	10	1⅜x2⅜x1⅜"	2.21
54 A 1458	*10,000	40,000CT	1:2	10	1⅜x2⅜x1½"	2.56
54 A 1460	‡10,000CT	90,000CT	1:3	10	1⅝x2⅞x1½"	3.21
54 A 3999	§10,000CT	8/4/2	1	40	1¹¹⁄₁₆x2¹³⁄₁₆x1¾"	3.17
54 A 4114	§10,000CT	500, 15/ 8/4	4	70	3½x2¹⁵⁄₁₆x3⅛"	7.57

A TUBE TESTER FILAMENT TRANSFORMER

Has multi-tapped secondary. Primary: 125/115/105 volts, 60 Hz. Secondary output volts: 1.1/1.4/1.5/2.0/2.5/3.0/3.3/4.0/5.0/6.3/7.0/7.5/12/20/25/30/35/50/70/85/110/117. Mounting centers: 3⁹⁄₁₆". Overall size: 2⅝x4x3¹⁄₁₆". Shpg. wt., 2½ lbs.
54 A 2083 .... Each 11.94

MICROPHONE OR LINE-TO-GRID TRANSFORMERS

Stock No.	Fig.	Primary Ohms	Sec. Ohms	Mtg. Ctrs.	Wt., Lbs.	EACH
54 A 3980	A	100	70KCT	2⅜"	½	3.92
54 A 3979	A	400CT	195K	1¾"	½	3.44

M STANDARD LINE-TO-VOICE-COIL TRANSFORMERS

500-ohm primary, except *2000/1500/1000/500 and §3000/2000/1500/1000/500 ohms. †Fig. E.

Stock No.	Secondary Imp., Ohms	Audio Watts	Size HxWxD	Wt., Lbs.	EACH
54 A 1442	4-8	*4	1⅜x2⅜x1½"	½	2.50
54 A 1423	6-8/3.2	5	1⅜x2⅜x1½"	½	2.00
54 A 1425	6-8/3.2	*8	1⅝x2¹³⁄₁₆x1⅝"	¾	3.10
54 A 1443	4-8	*12	2x3¼x1⅞"	1¾	3.38
54 A 1451	4/8/16	†§10	2⅜x2⅞x1⅞"	1¾	4.18
54 A 1424	15/8/6/4	†25	2⅜x2⅞x1⅞"	1¾	3.66

25-VOLT LINE-TO-VOICE-COIL TRANSFORMERS

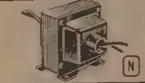
Secondaries: 4, 8, 16 ohms, except *3.2-4, 6-8.

Stock No.	Fig.	Watt Taps	Max. Watt	Size	Wt., Lbs.	EA.
54 A 1436	M	2, 1, 0 5	*2	1³⁄₁₆x2¹⁄₁₆x1¼"	¼	2.81
54 A 1437	M	5, 2 5, 1.25, 0 625, 0.31	*5	1⅝x2¹³⁄₁₆x1⅝"	¾	2.99
54 A 1438	M	10, 5, 2 5, 1.25, 0 625	10	2¼x3¹¹⁄₁₆x2"	1¾	4.61
54 A 1439	M	18, 9, 4.5, 2.25, 1.12	18	2⅝x4x2¼"	2½	4.46

E LINE TO LINE OR VOICE COIL TRANSFORMER

Designed to operate one or more speakers, in parallel, across a 500-ohm line. Primary impedance: 500-1000-1500 2000-2500-3000 ohms Secondary impedance: .06 to 8 ohms when primary is 500 ohms; .12 to 16 ohms when primary is 1000 ohms, etc. Size: 2⅜x2⅞x2". Mounting center: 2⅜". Audio power: 15 watts. Shpg. wt., 2 lbs.
54 A 3978 .... Each 4.74

U.L. RECOGNIZED CONTROL TRANSFORMERS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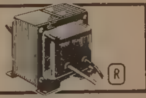
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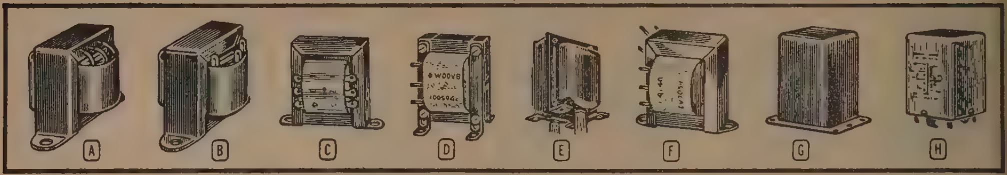
Industrial control transformers, recognized under the Component Program of Underwriter's Laboratories, Inc., for use where a 120-volt or low voltage 24 volt line is required. For 50/60 Hz operation. *Mounts onto a standard conduit box.

Stock No.	Fig.	VA Rating	Size, H x W x D	Mtg. Ctr's W x D	Wt., Lbs.	EACH
54 A 2275	P	50	4⁵⁄₃₂x4⁵⁄₃₂x4	*	3¼	6.70
54 A 2276	N	100	3½x3¾x4¼	3¼x1¹³⁄₁₆	5	9.00
54 A 2277	N	150	3½x3¾x5	3¼x2⁹⁄₁₆	6⅞	9.30
54 A 2278	R	250	4x4½x4⅞	3¾x3³⁄₁₆	10¼	13.90

Knight has more transformers available than shown in this catalog. For prompt price quotations, write, wire, or phone us.

Knight and Stancor Transformers



ALLIED'S OWN KNIGHT TRANSFORMERS

Compare specifications and prices. Allied's own Knight transformers always give you more for your money

FILAMENT TRANSFORMERS

Primaries, 117 volts, 50-60 Hz. *107 V tap on primary. All center-tapped, except †. §Has electrostatic shield.

Stock No.	Fig.	V	Amps	Insul., rms V	Size H x W x D	Wt., Lbs.	EACH
54 A 2319	D	2.5	10.0	10000	3⅜x2⅞x2½″	2¾	7.89
54 A 3712	A	2.5†	1.5	2500	1 11/16x2 13/16x1 9/16″	¾	3.36
54 A 3711	F	2.5*	10.0	7500	3⅛x3 9/16x3″	2½	4.70
54 A 4132	A	2.5	3.0	1500	1 11/16x2 13/16x1⅞″	¾	3.11
54 A 1478	F	2.5	5.0	5000	2¾x3⅛x2⅛″	1¾	4.25
54 A 1474	E	2.5	10.0	2500	3 3/16x2⅝x2 11/16″	2¾	5.74
54 A 1475	A	5.0	3.0	2500	2x3¼x2″	1½	3.70
54 A 2028	A	5.0	6.0	2500	2⅜x3⅝x2¼″	1¾	4.45
54 A 3714	D	5.0	15.0	2500	3x2½x3″	3	8.44
54 A 2320	D	5.0	10.0	2500	3⅛x2½x3″	3½	6.13
54 A 2321	D	5.0	21.0	2500	3¾x3⅛x3¼″	5	10.01
54 A 2322	E	5.0	30.0	2500	4⅝x3¾x4″	7½	13.77
54 A 2323	A	6.3†	1.2	5000	2x3¼x1⅞″	1	3.10
54 A 2324	D	6.3§	3.0	2500	3⅛x2½x2⅜″	2	5.10
54 A 2325	F	6.3	6.0	2000	3⅛x3 9/16x2½″	2½	4.34
54 A 2326	D	6.3*	20.0	2500	4⅝x3¾x2⅞″	7¼	11.35
54 A 1416	A	6.3	0.6	1500	1⅜x2⅜x1⅝″	½	1.91
54 A 2030	A	6.3	1.0	1500	1⅝x2 13/16x1¾″	¾	2.31
54 A 1419	A	6.3	1.2	3000	1⅝x2 13/16x1⅞″	¾	2.10
54 A 2031	A	6.3	3.0	2500	2x3¼x2⅜″	1½	2.15
54 A 1477	E	6.3*§	4.0	2500	3 3/16x2⅝x2 11/16″	2¾	6.00
54 A 4134	E	6.3	6.0	1500	3⅛x2⅝x2¾″	2½	7.31
54 A 1417	D	6.3	6.0	2500	3x2½x2¼″	2½	5.89
54 A 1418	D	6.3*	10.0	2500	3⅜x2 13/16x2⅞″	3½	7.57
54 A 4135	E	6.3§	20.0	2000	3⅞x3 5/16x4⅛″	7	11.63
54 A 2327	D	7.5§	4.0	2500	3⅛x2½x2 11/16″	2¾	5.41
54 A 2328	D	7.5§	8.0	2500	3¾x3⅛x2⅞″	4¼	8.79
54 A 2329	D	10.0§	4.0	2500	3⅜x2 13/16x2¾″	3½	6.90
54 A 2330	D	10.0§	8.0	2500	3¾x3⅛x3″	5	8.79
54 A 3720	D	10.0*§	5.0	2000	3x2½x4¾″	3	5.57
54 A 3721	E	10.0	10.0	2000	3⅞x3¼x3⅝″	5¾	10.06
54 A 4709	A	12.6	3.0	1500	2 5/16x3 11/16x2⅜″	1¾	5.07
54 A 4136	A	12.6	1.5	1500	2x3¼x2″	1½	4.07
54 A 1420	A	12.6	2.0	1500	2x3¼x2¼″	1½	3.68
54 A 4137	A	12.6	2.5	1500	2¼x3⅝x2¼″	1¾	5.02
54 A 4710	A	24.0	1.0	1500	2x3¼x2″	1½	4.49
54 A 1421	A	25.2†	1.0	1500	2x3¼x2⅛″	1½	3.63
54 A 4140	A	25.2	2.0	1500	2⅝x4x2⅜″	2½	6.26
54 A 1476	A	26.5	0.6	3000	2x3¼x2″	1½	3.33
54 A 4145	A	26.8	1.0	1500	2x3¼x2⅛″	1½	4.05

UNIVERSAL OUTPUT TRANSFORMERS

CT primary, except *single-ended output. 6 taps on secondary. Match single-ended or push-pull tubes to voice coil of speaker.

Stock No.	Fig.	Primary Impedances	Watts	Mtg. Ctrs.	Wt., Lbs.	EACH
54 A 2023	B	2000-14,000 ohms	4	2″	½	2.69
54 A 2021	B	2000-14,000 ohms	8	2⅜″	¾	3.02
54 A 2022	C	2000-14,000 ohms	18	2⅜″	1¼	4.21
54 A 1453	B	6000-10,000 ohms	8	2 13/16″	1¼	3.78
54 A 1404	B	*7000-10,000 ohms	4	2″	½	1.97

FIXED-IMPEDANCE OUTPUT TRANSFORMERS

For a wide variety of audio applications. All have center-tapped primary for push-pull operation.

Stock No.	Fig.	Impedance, Ohms		Audio Watts	Mtg. Centers	Wt., Lbs.	EACH
		Primary	Secondary				
54 A 1457	A	4000	8/16/32	7½	3⅛″	1¾	4.48
54 A 1455	E	6600	4/8/16/250/500	35	2½x2¼″	5¼	10.11
54 A 1456	A	25K	4	5	2″	½	2.55

HIGH-FIDELITY PUSH-PULL OUTPUT TRANSFORMERS

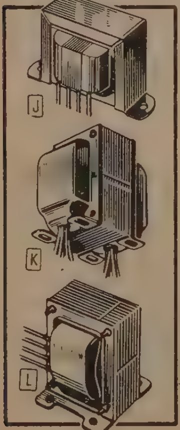
For use in high-fidelity audio amplifiers. Screen taps on primary for ultra-linear operation, except *no screen tap. Frequency response flat from 15 to 35,000 Hz, except types without screen tap flat 20-20,000 Hz. Secondaries 4, 8, 16 ohms, except ‡8, 16.

Stock No.	Fig.	Watts	P-P Imp.	mA	Size H x W x D	Wt., Lbs.	EACH
54 A 2082	H	12	8000	60	3¾x3x3¼″	3½	11.69
54 A 2024	E	12	8000	60	3⅛x2⅝x2¾″	2½	9.96
54 A 2058	A	*18	8000	65	2⅝x4x2½″	2¼	7.83
54 A 2054	E	24	6600	75	3⅞x3¼x3⅞″	6	16.76
54 A 2059	E	30	6600	100	3⅞x3¼x4″	6	17.48
54 A 2395	E	*‡50	5000	150	4¼x3½x4″	7	16.64
54 A 2397	E	*‡50	6600	125	4¼x3½x4″	7¼	16.64

OSCILLOSCOPE TRANSFORMERS

Pri. 117 V 60 Hz; *50-60 Hz. †2.5 V @ 2.2A; or 6.3 V @ 0.6 A. ††2.5 V @ 2.2 A.

Stock No.	Fig.	Plate Supply Volts AC	DC mA	Rect. Volts	Fil. Amps	Mtg. Centers	Wt., Lbs.	EA.
54 A 3726	G	1550 halfwave	1.5	2.5	1.75	1¾x2 11/16″	1¾	10.29
54 A 3727*†	E	1800 halfwave	2.0	2.5	1.8	2½x2 15/16″	5	11.09
54 A 3728††	E	2400 halfwave	5.0	2.5	2.0	2¾x2¾″	6½	14.40



STANCOR TRANSFORMERS

MINIATURIZED CONTROL TRANSFORMERS

Miniaturized control transformers with applications for pilot lights, miniature relays, low-current, low voltage power supplies. Primary 117 volts, 60 Hz AC; secondary, 24 volts CT. Lead wire terminations.

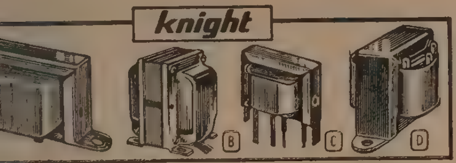
Stock No.	Mfr's Type	Fig.	Secondary Amps			Size H x W x D	Wt., Lbs.	EACH
			rms	Bridge	Half-Wave			
54 A 3441	P-8394	J	.085	.135 DC	.065 DC	1¼x2⅛x1¼″	¼	3.57
54 A 3442	P-8395	J	.200	.275 DC	.135 DC	1⅜x2⅜x1⅜″	⅓	3.72
54 A 3445	P-8396	J	.400	.550 DC	.270 DC	1½x2⅞x1⅝″	⅔	3.87
54 A 3453	P-8397	J	.700	.925 DC	.450 DC	1⅝x3¼x2″	1	4.80

TRANSISTOR STEREO POWER TRANSFORMERS

Designed to provide the most popular DC voltage and current ratings for full wave center tap or bridge rectifier circuits. Each transformer has a tapped primary and a tapped additional winding. By using the primary taps and the aiding of bucking action of the additional winding, can provide a wide range of output voltages and currents. 1500 volts rms insulation tested. 117 volt, 60 Hz primary. Lead terminations for easy connections.

Stock No.	Mfr's Type	Fig.	Secondary #1		Secondary #2		Size, In. H x W x D	Wt. Lbs.	EACH
			Volts	Amps	Volts	Amps			
54 A 1275	P-8197	K	50 CT	1.0 rms	...	....	3⅛x2½x2½	2¼	6.46
54 A 1276	P-8198	K	54 CT	0.5 rms	6.3	.5 rms	2⅝x2¼x2⅝	1¾	5.99
54 A 1277	P-8193	L	17/18	6.0 rms	...	....	3 13/16x3⅛x3 5/16	6	12.06
54 A 1278	P-8194	L	36	3.0 rms	36	3.0 rms	4 9/16x3¾x3 11/16	10	19.41
54 A 1279	P-8196	K	80 CT	1,2 DC	...	....	3½x2 13/16x3⅛	4½	9.86

Transformers, Yokes and Voltage Adjusters



TRANSISTOR TRANSFORMERS

's own line of economically priced, ruggedly constructed, transistor ormers. All are made from high-quality materials and provide ex- t power-handling capabilities and frequency response along with a num amount of distortion. Included are a wide selection of minia- nput, output, interstage and driver transformers in a variety of dance and ratio values for most transistor circuit requirements. In below, impedance and resistance-values are given in ohms. Av. wt., 6 oz. **Write, wire or phone Allied for information on tity purchases of ten or more transformers of one type.**

INPUT TRANSFORMERS

ock o.	Fig.	Pri. Imp.	Sec. Imp.	Watts	Size H x W x D	Mtg. Ctrs.	EACH
4146	A	600 CT	10	.050	1³⁄₁₆x1⅝x¾"	1⅜"	2.36
2355	C	30 CT	50K	.150	2¹⁄₃₂x1³⁄₁₆x⁹⁄₁₆"	²⁵⁄₃₂"	4.03
2356	A	1K CT	200K CT	.300	1³⁄₁₆x1⅝x¾"	1⅜"	4.03

OUTPUT TRANSFORMERS

ock o.	Fig.	Pri. Imp.	Sec. Imp.	Watts	Size H x W x D	Mtg. Ctrs.	EACH
2357	C	350 CT	4, 12	.150	2¹⁄₃₂x1³⁄₁₆x⁹⁄₁₆"	²⁵⁄₃₂"	3.90
2358	C	500 CT	4, 8, 16	.150	2¹⁄₃₂x1³⁄₁₆x⁹⁄₁₆"	²⁵⁄₃₂"	4.03
2359	C	600 CT	4, 8, 16	.150	2¹⁄₃₂x1³⁄₁₆x⁹⁄₁₆"	²⁵⁄₃₂"	4.24
2360	C	825 CT	4, 8, 16	.150	2¹⁄₃₂x1³⁄₁₆x⁹⁄₁₆"	²⁵⁄₃₂"	4.03
2363	C	10K CT	4, 8, 16	.150	2¹⁄₃₂x1³⁄₁₆x⁹⁄₁₆"	²⁵⁄₃₂"	4.15
4150	A	2000 CT	4, 8, 16	.200	1³⁄₁₆x1⅝x¾"	1⅜"	6.11
2365	A	100 CT	4, 8, 16	.300	1³⁄₁₆x1⅝x¾"	1⅜"	4.16
2367	A	400 CT	4, 8, 16	.300	1³⁄₁₆x1⅝x¾"	1⅜"	4.07
2368	A	500 CT	4, 8, 16	.300	1³⁄₁₆x1⅝x¾"	1⅜"	4.07
2370	A	2500	4, 8, 16	.300	1³⁄₁₆x1⅝x¾"	1⅜"	4.07
2371	A	3000	4, 8, 16	.300	1³⁄₁₆x1⅝x¾"	1⅜"	4.07
2337	A	20 CT	8	10	1⁷⁄₁₆x2⅜x1¾"	2"	2.28
4147	A	48 CT	3.2, 8, 16	10	2⁵⁄₁₆x2⅞x2"	2⅜"	3.70
4149	A	100 CT	3.2, 8, 16	10	2⁵⁄₁₆x2⅞x2"	2⅜"	3.70

INTERSTAGE TRANSFORMERS

ock No.	Fig.	Pri. Imp.	Sec. Imp.	Watts	Size H x W x D	Mtg. Ctrs.	EACH
2340	A	500 CT	5K CT	1.0	1⁷⁄₁₆x2⅜x1⅜"	2"	3.11
2373	C	500 CT	50	.150	2¹⁄₃₂x1³⁄₁₆x⁹⁄₁₆"	²⁵⁄₃₂"	3.99
2374	C	500 CT	50K	.150	2¹⁄₃₂x1³⁄₁₆x⁹⁄₁₆"	²⁵⁄₃₂"	4.07
2376	C	1500	500 CT	.150	2¹⁄₃₂x1³⁄₁₆x⁹⁄₁₆"	²⁵⁄₃₂"	3.80
A 2377	C	5K CT	7500 CT	.150	2¹⁄₃₂x1³⁄₁₆x⁹⁄₁₆"	²⁵⁄₃₂"	4.02
A 2378	C	5K CT	10K CT	.150	2¹⁄₃₂x1³⁄₁₆x⁹⁄₁₆"	²⁵⁄₃₂"	3.97
A 2387	C	10K	2K CT	.150	2¹⁄₃₂x1³⁄₁₆x⁹⁄₁₆"	²⁵⁄₃₂"	3.97
A 2390	C	500 CT	150 CT	.150	2¹⁄₃₂x1³⁄₁₆x⁹⁄₁₆"	²⁵⁄₃₂"	3.90
A 4180	C	20K	800 CT	.150	2¹⁄₃₂x1³⁄₁₆x⅝"	²⁵⁄₃₂"	3.29
A 2338	A	100 CT	10 CT	.250	1¼x2¹⁄₁₆x1⅜"	1¾"	2.29
A 2391	A	100K	1500 CT	.300	1³⁄₁₆x1⅝x¾"	1⅜"	4.05
A 4174	A	500 CT	500 CT	.300	1³⁄₁₆x1⅝x¾"	1⅜"	3.78

A DRIVER TRANSFORMERS

tock No.	Fig.	Pri. Imp.	Sec. Imp.	Watts	Size H x W x D	Mtg. Ctrs.	EACH
A 4153	A	100	200 CT	.500	1¼x2x1¼"	1¾"	2.55
A 4165	A	500 CT	200 CT	.500	1¼x2x1¼"	1¾"	2.51
A 4166	A	100	100 CT	.500	1⅝x2¹⁄₁₆x1⅜"	2⅜"	2.26
A 4152	A	20	36 CT	1.0	1¹¹⁄₁₆x2¹³⁄₁₆x1¼	1¾"	2.21

B POWER TRANSFORMERS WITH 117-VAC PRIMARIES

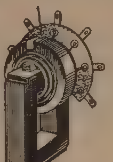
tock No.	Description	Size H x W x D	Wt., Lbs.	EA.
A 3987	Sec. 13 or 18 VAC, 900 mA, DC	3⅛x2⅝x2¹⁵⁄₁₆"	3	5.72
A 3988	Sec. 80 VCT, 1.2 A	3½x2¹⁵⁄₁₆x3⁹⁄₁₆"	4½	7.82

D AUDIO TRANSFORMER

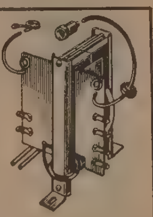
nary impedance: 2000 ohms, center tapped. Secondary impedance: ohms, center tapped. Maximum primary DC current: 10 mA. Audio ts, 0.1. ⅝x1¼x½". Mtg. centers: 1¹⁄₁₆". Shpg. wt., ½ lb.

A 3985..**Each 6.36**

STANCOR REPLACEMENT TV HORIZONTAL OUTPUT TRANSFORMERS



- For Replacement in Standard TV Receivers
- Designed to Provide Like-New Performance
- Constructed of Highest Quality Materials
- Minimum Alteration of Chassis or Circuit
- Same Characteristic as Original Unit



Top-quality flyback transformers for replacement in standard television receivers. Every transformer faithfully duplicates electrical characteristics of the original unit. Manufacturer's own specifications throughout; performance is identical in every respect. Minimum alteration of existing circuit or chassis is required, easy installation is assured Stancor's high degree of quality material and production control insures the utmost in product reliability at the lowest possible cost *Color. Shpg. wt per transformer, 1 lb.

Stock No.	Mfr.	Type	Mfr. Part	EACH
54 A 1206	Admiral	HO-164	79D47	11.42
54 A 1207	Admiral	HO-204	79C60-1-4	8.94
54 A 3459	Admiral	HO-242	79D65-1	8.94
54 A 1204	Admiral	HO-301	79D65-2-4	9.84
54 A 1214	Admiral	HO 397	750C647-3	9.00
54 A 1216	Admiral	HO 404	79D117-1	6.67
54 A 3470	GE	HO-254	RTO 129 183-190	8.94
54 A 1568	GE	HO-377	WT 77x41, 42, 44, 45	9.90
54 A 1220	GE	HO 378	WT-77x43, 46, 47, 48	9.90
54 A 1221	GE	HO-389	ET77X74	8.10
54 A 1225	GE	HO 402	ET-77X90	9.60
54 A 1227	Motorola	HO-280	24K741938	11.42
54 A 1213	Motorola	HO-293	24C736488	12.00
54 A 1184	Motorola	HO 344	24K748397 W	9.90
54 A 1569	Olympic	HO-315	TR 3599 A-D 1-2-3 4 5 6	9.00
54 A 1231	Zenith	HO-363	49918, 50095, 50097	9.90
54 A 1232	Zenith	HO-364	S51583, S5840-C, S58826	9.90
54 A 1233	Zenith	HO 366	S46564	9.90
54 A 1563	Zenith	HO-380	S58350 S65352 S66717-S68398	11.90
54 A 1589	.	HO-600C*	Multipurpose	14.40
54 A 1188	....	HO-601C*	Multipurpose	13.50
54 A 1235	Admiral	HO 607C*	Multipurpose	15.00

DEFLECTION YOKES

For 110° deflection angle picture tubes except †90°, ‡70° Have ferrite cores with cosine-wound windings. All have networks and extra long leads where needed. *Color. Av. shpg. wt. per yoke, 1½ lbs.

Stock No.	Type	Mfr. Part	EACH
54 A 4590	DY 9A‡	Multipurpose	10.24
54 A 4596	DY-11A‡	Multipurpose	11.24
54 A 3481	DY 13A	Multipurpose	11.42
54 A 1236	DY-16A†	Multipurpose	11.90
54 A 1570	DY-26A	RCA 906125-504	12.55
54 A 1245	DY-27A	RCA 109965	11.40
54 A 1247	DY-38A	Multipurpose	11.24
54 A 1251	DY-42A	RCA 103830	10.80
54 A 1274	DY 51A	Packard Bell 29758, A	13.20
54 A 1259	DY 54A	Philco 7612530	13.20
54 A 1263	DY-59AT	Multipurpose	13.20
54 A 1264	DY-61AT	Multipurpose	13.22
54 A 1265	DY 63A	Multipurpose	13.17
54 A 1590	DY-90AC*‡	Multipurpose	29.70
54 A 1266	DY 91AC*†	Zenith 95 2501	26.19

TERADO LINE VOLTAGE ADJUSTERS

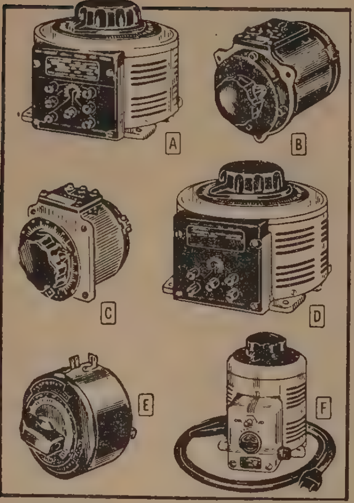
Model 60-172 "Saturn". Changes AC line input voltage by as much as 25 volts above or below the normal 110 120 volt AC range. Built-in AC voltmeter provides accurate voltage control. Capacity: 300 watts continuous; 500 watts intermittent. Can be used to regulate the speed of any power tool with up to ⅓ hp rating. (Decreases speed without any noticeable power torque low.) Dims or brightens incandescent lamps. Excellent for increasing or decreasing AC line voltage where exact voltages are needed for precision equipment. 5½x3x2¼". Shpg. wt., 3 lbs.

21 A 4449 ....14.64

ATTENTION BUYERS

Allied stocks more complete lines of Knight, Chicago/Stancor, Triad and UTC transformers. Not all of our transformers are listed in this catalog due to space limitations. For information on items not listed and price quotations, write Allied. This catalog is your guide through the world's largest stock of electronic equipment. When you order from Allied you receive prompt shipment and low prices.

Selected Variable Transformers



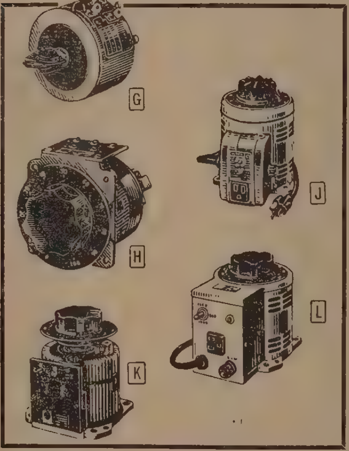
SUPERIOR POWERSTAT® VARIABLE TRANSFORMERS

Deliver continuously adjustable output voltage from AC line. Zero waveform distortion, good regulation, conservative ratings. For 50-60 Hz. (‡60 Hz only.) Enclosed for plane surface mtg. except 10B, 21, 22. Suffix "U" indicates open types for panel mtg. Series 21, 22, 126, 236B are for panel or surface mtg. Prefix "Q" same as Fig. C but 4-hole square mtg. plate. †Indicates amperage output when mounted on metal panel; for non metal panel, or bracket mtg., derate to 1.75 amps with corresponding reduction in maximum kVa.

SINGLE-PHASE TYPES

*In table indicates unit is equipped with 3-wire plug and receptacle. Type 22 uses specially developed coil-winding technique for higher voltage rating without requiring size and weight increase.

Stock No.	Mfr's Type	Fig.	Input Volts	Output			Max. Size (DWH)	Wt., Lbs.	EACH
				Volts	Amps	kVA			
54 A 1667	‡117BU	B	120	0-120	12.0	1.4	5x5⅛x5¾"	11	25.00
54 A 4310	‡Q117U	B	120	0-120	12.0	1.4	4⅞x4¼x5¹¹⁄₁₆"	11	25.00
54 A 1163	21	C	120	0-140	4.5	0.63	3⅜x3¾x4½"	6	18.00
54 A 2524	116BU	B	120	0-140	10.0	1.4	5x5⅛x5¾"	11	23.00
54 A 4311	Q116U	B	120	0-140	9.0	1.3	4⅞x4¼x5¹¹⁄₁₆"	11	23.00
54 A 1669	126U	D	120	0-140	15.0	2.1	4¼x6x6¾"	16	43.00
54 A 4316	Q216U	B	240	0-280	3.5	0.98	4⅞x4¼x5¹¹⁄₁₆"	11	28.00
54 A 3024	22	C	240	0-280	2.25	0.63	4⁹⁄₁₆x3¾x4¹³⁄₁₆"	6	26.00
54 A 1678 X	236B	A	120-240	0-280	10.0	2.8	8⅞x7¾x6⅛"	23¾	68.00
54 A 1666	*3PN117B	F	120	0-120	12.0	1.4	7¼x5⅛x6½"	12	41.00
54 A 2536	‡10B	E	120	0-132	†2.25	0.3	2⅛x2⅞x3⅛"	2.4	12.00
54 A 2525	116B	F	120	0-140	10.0	1.4	7⅛x5⅛x6½"	12	32.00
54 A 2527	216B	F	240	0-280	3.5	0.98	7⅛x5⅛x6½"	12	36.00



STACO VARIABLE AUTOTRANSFORMERS

Wide selection of variable transformers designed for efficiency, reliability and minimum maintenance. Where possible, all models have epoxy coated coils for increased commutator stability. Optimum core and coil design results in higher current ratings and greater overload capabilities. Units are designed to deliver output voltages of zero to line voltage or zero to 17% above line voltage. Terminals permit connection for increasing voltage with either clockwise or counterclockwise rotation of the knob. Regulation is substantially independent of the load; zero waveform distortion. Experiences only moderate temperature rise during operation. Precious metal plating of commutator surface. Operate at 50-60 Hz, except: *60 Hz operation only at over voltage.

120-VOLT SINGLE-PHASE PANEL MOUNTING

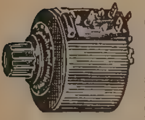
Stock No.	Mfr's Type	Mfr's Old Type	Fig.	Output			Size	Wt., Lbs.	EACH
				Volts	Amps	kVA			
54 A 4307	171	175BU	G	*0-120/132	1.75	.23	2¹³⁄₁₆x2⁹⁄₁₆"	3	10.50
54 A 2579	251	250BU	G	*0-120/132	2.5	.33	2¹³⁄₁₆x2⁹⁄₁₆"	3.5	11.25
54 A 4306	371	375BU	H	*0-120/140	3.75	.53	3¾x3¾x3¼"	5	15.75
54 A 1614	501	451	H	0-120/140	5.0	.70	3¾x3¾x3⁵⁄₁₆"	5	16.00
54 A 1967	601	T51U	H	0-120/140	6.0	.84	4½x4½x3¹⁵⁄₁₆"	6	21.00
54 A 1615	1010	1000	K	0-120/140	10.0	1.4	5¹⁄₁₆x5x4³⁄₁₆"	11	21.00

120-VOLT SINGLE-PHASE PORTABLES WITH CORD AND RECEPTACLE

Models housed in rugged case and include pilot light, switch, fuse, line cord and plug with matching receptacle. 2PF model is equipped with 2-wire cord, plug and receptacle; 3PN has 3-wire grounded cord, plug and receptacle. **60 Hz only.

54 A 0977	2PF171	PA-175	J	**0-132	1.75	.23	3⅞x3⅞x3½"	3.5	20.00
54 A 1618	3PN1010	3PN1000	L	0-120/140	10.0	1.4	6⅞x5x4⁷⁄₁₆"	12.5	33.00

OHMITE SMALL VARIABLE TRANSFORMERS



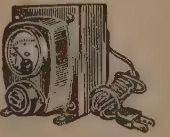
Three-bushing-mounted variable transformers offer six ratings from 1 to 3 amps. Wide frequency range extends from 60 to over 400 Hz on all models. Exclusive adjustable shaft makes it possible to extend shaft from either end. Shaft may also be removed, and a longer one substituted. Also features replaceable snap-in brush contact with built-in heat sink. Diameter (all models): 2⅞". Length: VT1, 1¹³⁄₁₆"; VT02, 2⁵⁄₁₆"; VT3, 2¹³⁄₁₆".

Stock No.	Mfr's Type	Max. Amps	Max. V Input	Output Volts	Wt., Lbs.	EACH
54 A 3800	VT1	1.0	120	0-120/132	1½	9.00
54 A 3801	VT1N	1.2	120	0-120	1½	9.00
54 A 3802	VT02	1.75	120	0-120/132	2¼	10.00
54 A 3803	VT02N	2.0	120	0-120	2¼	10.00
54 A 3804	VT3	2.6	120	0-120/132	3	11.50
54 A 3805	VT3N	3.0	120	0-120	3	11.50
54 A 3806	6507	Brush Contact Assembly			1 oz.	1.00

ACME TYPE T8394M VOLTAGE ADJUSTER

Constant duty, tapped-winding transformer for use where line voltage is above or below normal for long periods of time. With regulating switch and built-in voltmeter. Rated 300 watts. Regulating input switch positions for 95, 100, 105, 110, 115, 120, and 125 volt 50-60 Hz. Has secondary receptacle and 8-ft. cord. 4¾x4x5".
54 A 2514. Shpg. wt., 6 lbs.........13.40

ACME TYPE T10306 VOLTAGE ADJUSTER

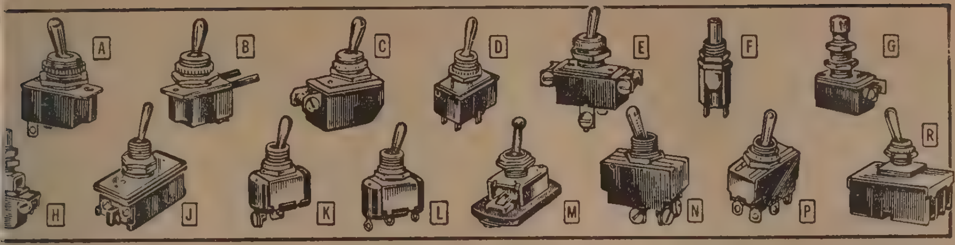


Constant-duty 150 watt step-up/step-down transformer. Built-in voltmeter shows secondary output. Primary winding tapped for 65, 75, 90, 115, 130, 145 volts, 50-60 Hz. Nonaging silicon steel laminations. Coils impregnated with high dielectric insulating material. With 8′ cord, plug, output receptacle. 4¼x4¼x4¼". Mtg. center, 5¼x3¼".
54 A 2501. Shpg. wt., 7 lbs.........20.80

Allied handles the entire line of Staco and Superior variable transformers, and can supply you promptly with any model.

If you need a transformer not listed, simply contact Allied for complete price and delivery information.

Cutler-Hammer Switches



AC-DC PUSHBUTTON AND TOGGLE SWITCHES

LIGHT-DUTY TYPES

nient one-hole-mounting switches for ation on flat surfaces. Phenolic case. ia. threaded stem; 15⁄32″ stem length, *¼″. †6″ wire leads, ‡screw termi- others solder lug terminals. ■U.L. ., C.S.A. Listed. Av. wt., 3 oz.

SPST

ck .	Mfr's Type	Fig.	Amperes 125V	Amperes 250V	EACH
527	8280K14*	A	.....	3	.70
500	8280K16	A	.....	3	.70
784	8290K16†	B	.....	3	.84
786	8295K8‡	C	.....	3	.84
508	8381K8	C	6	3	.80
789	8391K8†	B	6	3	.94
791	8396K8‡	C	6	3	.94
SPDT					
528	8282K12*	D	3	1	.88
501	8282K14	D	3	1	.88
DPST					
529	8360K6*	D	.....	3	1.25
502	8360K7	D	.....	3	1.25
792	8370K7	D	6	3	1.35
793	8372K7‡	D	6	3	1.64
DPDT					
4530	8363K6*	D	.....	3	1.44
4503	8363K7	D	.....	3	1.44
5943	8365K7‡	E	.....	3	1.90
4632	8373K7	D	6	3	1.55
4795	8375K7‡	E	6	3	1.99

PUSHBUTTON AC-DC TYPES

entary-contact. For controlling cur- oy opening or closing of a door—i.e., te lights in refrigerators, closets, etc. solder lugs except *screw-type. Black n, except †¼″ metal button. §Push- type. ■U.L. Recog. Av. wt., 3 oz.

75 Amp @ 125 V—.25 Amp @ 250 V

ck o.	Mfr's Type	Fig.	Action	Lgth. In.	EA.
5987	8411K12*	F	SPST n.o.	15⁄32	.53
4548	8411K11	F	SPST n.o.	15⁄32	.47
4631	8411K13	F	SPST n.o.	¼	.47
5988	8411K7*	F	SPST n.c.	15⁄32	.40
4547	8411K8	F	SPST n.c.	15⁄32	.34
Amps @ 125 V—1 Amp @ 250 VAC					
4549	8440K2	F	SPST n.o.	15⁄32	.96
4541	8440K3*	F	SPST n.o.	15⁄32	1.11
Amps @ 125 V—3 Amps @ 250 V					
4515	7190K1	H	SPST n.o.	½	1.40
4691	7196K1*	H	SPST n.o.	½	1.55
4519	7208K4*§	G	SPST	11⁄16	1.20
3828	8442K4†	...	SPST n.o.	11⁄32	1.06
Amps @ 125 V—10 Amps @ 250 VAC					
5538	8448K2*	...	DPST n.o.	11⁄32	1.63

AC-DC LIGHT-DUTY TYPES—PLASTIC

Rugged, all-plastic construction for resistance to moisture. Have maximum insulation for added safety. Fast operating. Solder-lug terminals; 11⁄32″ stem length. ■U.L. Recog., C.S.A. Listed. Av. wt., 3 oz.

SPST

Stock No.	Mfr's Type	Fig.	Amperes 125V	Amperes 250V	EACH
56 A 5664	8281K16	A	6	3	.80
SPDT					
56 A 5665	8282K18	D	3	1	.88
DPST					
56 A 5666	8360K12	D	....	3	1.25

HEAVY-DUTY AC-DC TYPES

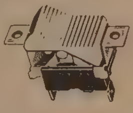
J For control of moderate horsepower motors, etc. Have screw terminals; 15⁄32″ threaded stem and length. ■U.L., except 8825K5 (Fig. P), which is JAN S-23; *rated 20 amps @ 28 VDC. Wt., 3 oz.

DPST

Stock No.	Mfr's Type	Amperes 125V	Amperes 250V	EACH
56 A 4545	7320K3	16	8	1.40
56 A 4516	7360K8	20	10	2.41
56 A 4517	7402K4	1½ hp	20	3.24
SPST				
56 A 4520	7321K3	16	8	1.50
56 A 4714	7361K5	20	10	2.52
DPDT				
56 A 4715	8690K2	15	10	5.05
56 A 4555	8825K5	*20	10	1.79

"ROCKETTE" APPLIANCE SWITCHES

Actuator is of molded white nylon. 1⅞x21⁄32x 117⁄32″, including flanges and terminals. Quick-connect "Faston" terminals, except *screw. All AC 2-position except † center-off. ■U.L. Recog. Wt., 3 oz.



15 Amps @ 125 V—10 Amps @ 250 V

Stock No.	Type	Action	EACH
56 A 5699	8144K21A1M52	SPST	.74
56 A 5339	8144K21A1M50*	SPST	.81
56 A 5704	8144K20A1M52	SPDT†	.84
56 A 5718	8142K21E6M52*	DPST	1.13
56 A 5540	8142K21E6M50	DPST	1.29
56 A 5712	8142K20E6M52	DPDT†	1.38

AC TOGGLE SWITCHES

LIGHT-DUTY TYPES

Slow make and break switches rated 6 amps @ 125 volts and 3 amps @ 250 volts, except Type 7140K6, 3 amps @ 125 volts. *Center-off positions. Have threaded stem diameter of 15⁄32″; stem length, 15⁄32″, except †11⁄32″. Solder terminals, except ‡screw terminals. ■U.L. Recog. Av. shpg. wt., 3 oz.

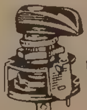
Stock No.	Mfr's Type	Fig.	Action	EACH
56 A 4640	7580K4‡	K	SPST	.74
56 A 4641	7580K6	K	SPST	.63
56 A 4522	7140K6†‡	M	SPDT	.77
56 A 4642	7581K4*‡	L	SPDT	.84
56 A 4643	7581K6*	L	SPDT	.68
56 A 4644	7582K4‡	L	SPDT	.84
56 A 4645	7582K6	L	SPDT	.68
56 A 4646	7590K4‡	N	DPST	1.04
56 A 4647	7590K6	N	DPST	.91
56 A 4648	7591K4*‡	P	DPDT	1.33
56 A 4649	7591K6*	P	DPDT	1.02
56 A 4689	7592K4‡	P	DPDT	1.33
56 A 4690	7592K6	P	DPDT	1.02

STANDARD-DUTY TYPES

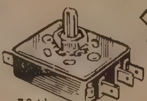
For appliances, instruments, small motor-driven devices. Rated 10 A at 250 V and 15 A at 125 VAC. *Center-off. 15⁄32″ threaded stem, 15⁄32″ long. †Screw terminals. ‡Solder terminals. Wt., 3 oz.

Stock No.	Mfr's Type	Fig.	Action	EACH
56 A 4591	7500K14†	K	SPST	.84
56 A 4534	7501K13†	K	SPST	.73
56 A 4592	7502K13*†	L	SPDT	.99
56 A 4796	7503K13*‡	L	SPDT	.84
56 A 4593	7504K4†	L	SPDT	.99
56 A 4536	7505K4‡	L	SPDT	.84
56 A 4594	7560K5†	N	DPST	1.33
56 A 4537	7561K4‡	N	DPST	1.12
56 A 4596	7562K4*†	P	DPDT	1.63
56 A 4539	7563K4*‡	P	DPDT	1.33
56 A 4595	7564K6†	P	DPDT	1.63
56 A 4538	7565K5‡	P	DPDT	1.33
56 A 4543	7611K2‡	R	3PST	2.18
56 A 4523	7613K2*‡	R	3PDT	2.68
56 A 4798	7615K2‡	R	3PDT	2.68

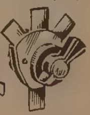
ROTARY AC-DC AND AC SWITCHES



8122, 8123



7241



7011, 7012

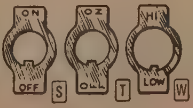
For fans, air conditioners, etc. Types 7011K1 and 7012K4 are AC-DC; have screw terminals; ⅜″ stem. Types 8122K4 and 8123K4 are for AC; have solder-lug terminals; ⅜″ stem. 7241K2 is for AC; has "quick connect" ¼″ terminals; 5⁄16″ stem length. ■U.L. Recog., C.S.A. Listed. Av. shpg. wt., 6 oz.

Stock No.	Mfr's Type	Action	Amperes 125V	Amperes 250V	EA.
56 A 5658	7011K1	2 on, 1 off	5	2	1.63
56 A 5659	7012K4	3 on, 1 off	5	2	1.67
56 A 5660	8122K4	2 on, 1 off	3	....	.59
56 A 5661	8123K4	3 on, 1 off	3	....	.64
56 A 5662	7241K2	DPDT	1 hp	15	1.73

ON-OFF SWITCH PLATES

gned to fit in threaded of toggle hes. ½″ dia. Shpg. wt., kg. 4 oz.

Stock No.	Mfr's Type	Fig.	Pkg. of 10
56 A 5613	827-228F3	S	.65
56 A 5614	827-228F13	T	.65
56 A 5615	827-228F16	W	.65



Rotary, Pushbutton, Snap and Knife Switches

GRAYHILL MINIATURE SWITCHES

PUSHBUTTON SWITCHES

23
30
35
39
4000

Rugged, momentary contact, pushbutton switches with solder-lug type terminals. Normally open types (indicated by N.O. in table) have red buttons. Normally closed types (indicated by N.C. in table) have black buttons.

SERIES 23

Miniature, over 500,000 operations. Shpg. wt., 2 oz.

Stock No.	Mfr's Type	Action	Amps @ 115 VAC	Size L x Dia.	Mtg. Hole	EACH
56 A 4970	23-1	SPST N.O.	1/4	1 1/32x1/2″	21/64″	1.10

SERIES 30

Subminiature, over 1 million operations. Wt., 2 oz.

Stock No.	Mfr's Type	Action	Amps @ 115 VAC	Size L x Dia.	Mtg. Hole	EACH
56 A 4967	30-1	SPST N.O.	1	1″x3/8″	17/64″	.95
56 A 4966	30-2	SPST N.C.	1	1″x3/8″	17/64″	.95

SERIES 35

Miniature, over 100,000 operations. Wt., 3 oz.

Stock No.	Mfr's Type	Action	Amps @ 115 VAC	Size L x Dia.	Mtg. Hole	EACH
56 A 4964	35-1	DPST N.O.	1/2	1 17/64x51/64″	31/64″	1.40

SERIES 39

Ultraminiature, over 1 million operations. Wt., 2 oz.

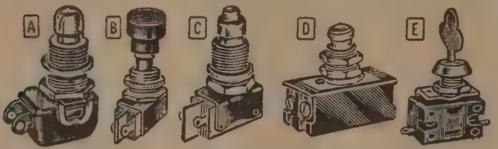
Stock No.	Mfr's Type	Action	Amps @ 115 VAC	Size L x Dia.	Mtg. Hole	EACH
56 A 4968	39-1	SPST N.O.	1/2	39/64x1/4″	11/64″	1.15

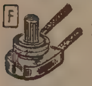
SERIES 4000

Silent action, over 100,000 operations. Wt., 3 oz.

Stock No.	Mfr's Type	Action	Amps @ 115 VAC	Size L x Dia.	Mtg. Hole	EACH
56 A 4870	4001	SPST N.O.	1	1 1/2x51/64″	31/64″	1.00
56 A 4871	4002	SPST N.C.	1	1 1/2x51/64″	31/64″	1.00

ARROW-HART SWITCHES





PUSHBUTTON SWITCHES

Momentary-contact types except *push-on, push-off. All for 125 V AC-DC, except †AC only. Have 15/32″ dia. shanks; 9/16″ long, except Type 80630, 7/16″ long. Have solder lug terminals, except § screw-type. 3 oz.

Stock No.	Mfr's Type	Fig.	Action	Button Color	Amps	EACH
56 A 4159	3391-GL†	B	SPST-N.O.	Black	1	.98
56 A 3830	3391-GL†	B	SPST-N.O.	Red	1	.98
56 A 4124	3392-AE†	B	SP2-N.C.	Black	1	1.19
56 A 4129	3392-AE†	B	SP2-N C.	Red	1	1.19
56 A 3846	80541-E†	A	SPST-N.O.	Black	3	.98
56 A 3847	80541-ER†	A	SPST-N.O.	Red	3	.98
56 A 4152	80630§	D	DPST-N.O.	Nickel	6	2.05
56 A 4160	86710	C	SPST*	Nickel	3	1.24
56 A 4161	86710-C	B	SPST*	Red	3	1.46
56 A 4162	86710-C	B	SPST*	Black	3	1.46
56 A 4163	80863-R	D	DPST	Nickel	8	2.14
56 A 4187	3599-GF	D	DPDT	Red	3	2.41
56 A 4188	3599-GF	D	DPDT	Black	3	2.41

LOCK SWITCHES

E **Type 81715-L.** For use on power tools, appliances, etc. SPST contacts, rated 3 amps @ 250 volts; 6 amps @ 125 volts. Sleeve diameter, 15/32″. Fits panels to 9/32″ thick. 1 3/4x27/32x29/32″. Switch must be open to remove key. Shpg. wt., 4 oz.

56 A 4156..2.13

56 A 4128. Extra Key. For above. Wt., 1 oz.......................20

E **Type 81715-LE.** Same as 81715-L switch above, but key is removable in open or closed position. Wt., 4 oz.

56 A 4158..2.13

56 A 3876. Extra Key. For above. Wt., 1 oz.......................20

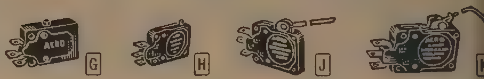
F TYPE 41047 ROTARY SWITCH

Designed for replacement applications in lamps and other medium current AC-DC appliances. SPST action. Rated 3 amps at 125 V; 1 amp at 250 V. Has 6″ leads for easy installation. 3/8″ diameter, with 5/16″ shank. Shpg. wt., 2 oz.

56 A 4165... .77

ROBERTSHAW SNAP-ACTION SWITCHES

LIGHT-PRESSURE SWITCHES

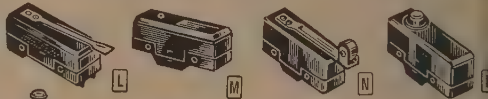


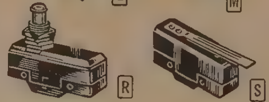
Miniature single-pole, double-throw switches for a variety of ap plications. Perfect for jobs where space is limited. Also when "pr travel" distance, weight, or operating force are critical. Typ 1CMD1-2AXX-A22 and Type 2CMD1-2AXX-A24 have a wi leaf actuator; all others are basic pin plunger types.

Operating force for 1MD1-1A, 3-6 oz.; 2MD3-1A, 6-10 oz.; 1CMD 2AXX, 20-27 gr.; 2CMD1-2AXX, 33-44 gr.; 1CMD1-2AXX-A2 2.5 gr.; 2CMD1-2AXX-A24, 4 gr. Pre-travel for 1MD1-1A, 2MD 1A, 1/32″; 1CMD1-2AXX, 2CM1-2AXX, 0.040″. Amp ratings fo 125-250 volts AC are 3 amps except *10 amps. U.L. Componen Program-Recognized. Shock resistant. Solder terminals. Av., 4 oz.

Stock No.	Mfr's Type	Fig.	Basic Switch Size	EACH	
				1-9	10-1
56 A 5009	1MD1-1A*	G	1 5/8x9/32x53/64″	1.32	1.19
56 A 5019	2MD3-1A*	G	1 5/8x9/32x53/64″	1.32	1.19
56 A 5020	1CMD1-2AXX	H	1 5/8x9/32x1 3/64″	1.32	1.19
56 A 5021	2CMD1-2AXX	H	1 5/8x9/32x1 3/64″	1.32	1.19
56 A 5024	1CMD1-2AXX-A22	K	3 1/32x9/32x1 5/8″	1.63	1.47
56 A 5030	2CMD1-2AXX-A24	J	2 9/32x29/32x1 19/32″	1.63	1.47

B SERIES SWITCHES WITH MICRO EQUIVALENTS

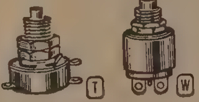




Long-life replacements fo micro-switch types shown i table below. All are SPD with step base design an screw terminals, except Typ BRD2-5L, which has flat bas and solder terminals. Contacts rated 1/8 HP @ 125 V AC, 1/4 HP (250 V AC; and 0.5 amp at 120 volts DC. Av. shpg. wt., 4 oz.

Stock No.	Mfr's Type	Micro Equiv.	Fig.	Basic Size	EAC
56 A 3968	BRD2-5L	BZ-2RL	L	2 13/32x1 1/32x1 1/16″	1.8
56 A 3969	BRD2-1A-1S	BZ-2R-A2	M	1 15/16x31/32x1 1/16″	1.7
56 A 3970	BRD2-2M-1S	BZ-2RL2-A2	N	2 15/32x1 15/32x1 1/16″	2.5
56 A 3972	BRD2-7O-1S	BZ-2RD-A2	P	1 15/16x1 3/16x1 1/16″	2.1
56 A 3973	BRD2-1P-1S	BZ-2RQ1-A2	R	1 27/32x1 15/16x1 1/16″	3.6
56 A 3971	BRD2-5L-1S	BZ-2RL-A2	S	2 13/32x1 3/32x1 1/16″	2.0

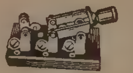
SNAP-ACTION PUSHBUTTON SWITCHES



Momentary contact pushbutto switches. Type 3DO5-5P, normal open; 3DC5-5P, normally close QPD-5031 wires either way. All hav overtravel plungers with solder te minals. Amp ratings at 125 VAC Avg. shpg. wt., 4 oz.

Stock No.	Mfr's Type	Fig.	Action	Size	Amps	EAC
56 A 5328	QPD-5031	T	SPDT	1 5/64x23/32″ dia.	10	3.2
56 A 5028	3DO5-5P	W	SPST	1 37/64x15/16″ dia.	12	1.8
56 A 5029	3DC5-5P	W	SPST	1 37/64x15/16″ dia.	12	1.8

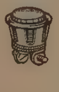
EAGLE KNIFE SWITCHES



Rugged, low-cost knife switches for heavy-dut applications in power circuits. For motors, tran mitters, mixing machines, or stage lighting. Pro vide smooth, easy action. All units rated 25 amp 125 VAC. Have screw terminals and bakeli base except Type 617, porcelain. Av. wt., 2 o

Stock No.	Mfr's Type	Action	Size	EACH
56 A 4884	612	SPST	1 5/8x1″	.28
56 A 4886	613	SPDT	2 5/8x1″	.32
56 A 4887	614	DPST	1 3/4x1 1/2″	.44
56 A 4888	615	DPDT	2 5/8x1 5/8″	.48
56 A 4889	617	SPST	3 1/16x1 1/8″	.42

EAGLE FLUSH-MOUNT PUSHBUTTON SWITCH

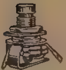


Type 188. Momentary contact. 6-leaf spider secures switc in 5/8″ hole. Ideal for signaling bells, lights, etc. 9/16″ shan depth. 25/32″ overall. Screw terminals. Contacts are SPST normally open. Pearl button. Shpg. wt., 2 oz.

56 A 4890...................................... **Each .4**

Switches by Switchcraft

LITTEL" SWITCHES



ure. non-locking pushbut- ·pe switches for limited ıpplications. One-piece but- .l shaft. Red or black button. means normally open; N.C. normally closed. Nickel silver contacts; sections are insulated. ⅜" threaded ⅜" long. For low-level currents only. .15 VAC n on-inductive. Complete with ıre. Shpg. wt., 3 oz.

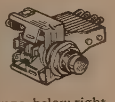
k ı.	Mfr's Type	Button Color	§Action	EACH
ı944	101	Red	SPST N.O.	.60
ı945	102	Red	SPST N C.	.60
ı946	103	Red	SPDT	.69
ı947	201	Black	SPST N.O.	.60
ı948	202	Black	SPST N.C.	.60
ı949	203	Black	SPDT	.69

ıINATED "LITTEL-LITE" SWITCHES

r to above, but clear plastic pushbutton ıaft illuminated by 6 or 28 V. lamp (not ·d, see below right). 3 A, 300 W @ 115 maximum non-inductive load. With 4 :hips (red, amber, green, yellow). Shpg. oz.

ɔck o.	Mfr's Type	Action	EACH
4607	211S	SPST N.O.	1.26
·4609	213S	SPDT	1.50

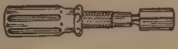
JMINATED "NF-LITE" SWITCHES



s 4100. Pushbutton indicate switching and functions. Rated 3 300 W. max., AC non- ive. With 4 color chips amber, green, yellow). ¹¹⁄₁₆" 1⁵⁄₁₆" behind panel; in ⅜" hole in panels up thick. Less lamp. See lamps, below right. wt., 4 oz.

ɔck o.	Mfr's Type	Action	EACH
4613	4106	DPDT	1.56
4614	4109	3PDT	2.01

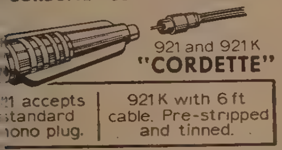
SWITCH WRENCHES



constructed al wrenches ned to fit :d or milled- ocknuts furnished with toggle, lever and n switches and jacks. Adjustable sleeve ıaft holds nuts tightly. Rugged knurled e provides sure, firm grip and assures of dependable service. Shpg. wt., 10 oz.

·tock No.	Mfr's Type	Nut Size	EACH
·A 4605	A-1070	¹⁵⁄₃₂"-32	4.50
·A 4606	A-1071	¼"-32	4.50

"CORDETTE" CONTROL SWITCH


921 and 921 K
"CORDETTE"
·1 accepts ;tandard ıono plug.
921 K with 6 ft cable. Pre-stripped and tinned.

·entary-action pendant switch. Designed :rovide remote switching of electrical es. Fits comfortably in the hand, yet ·d enough for critical applications. One- body of high-strength molded plastic, en- ·l to protect switching contacts.

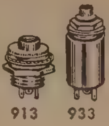
·mosetting plastic insulation. One-amp ·T circuit with integral brass, hard-gold- ·d 500-mA contacts. 50 watts max., AC ·nductive load. For low-voltage circuits.

e 921 has Switchcraft Phono-Jax output ed direct to the body. Industry standard · accepts most phono plugs; molded cable ·nblies such as Switchcraft Part Nos. .C84, 25AF30, 25AC82. (See page 361 for · assemblies).

e 921-K has 6-ft., 2-conductor unshielded ·, stripped and tinned. 1³⁄₁₆x2¹⁵⁄₁₆".

:Stock No.	Mfr's Type	Wt. Oz.	EACH
A 5799	921	1	2.55
A 5800	921-K	4	3.00

TYPE 900 MINIATURE SPDT "BUTTON" SWITCHES

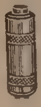


Well-designed long-life momentary-action pushbutton switches in metal housing. Each type has black plastic button. Type 913 is ½" long, fits ¹⁵⁄₃₂" hole, and provides behind-panel mounting. Type 933 is ⅞" long, fits ¼" hole, and mounts from front. Both rated at 250 mA, 30 watts maximum, AC non-inductive. Both are SPDT. Shpg. wt., 2 oz.

56 A 5418. Type 913........................87

56 A 5420. Type 933........................93

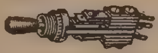
REMOTE-CONTROL SPDT PUSHBUTTON SWITCH



Useful hand-held switch has many fine applications such as remote control of recorders, lights, counters, etc. Momentary contact, SPDT switch in a nickel-plated sleeve. Rated 250 mA., 30 watts max. AC non-inductive. 1¹⁄₁₆x2¹⁄₁₆" long. Shpg. wt., 4 oz.

Stock No.	Mfr's Type	Button Color	EACH
56 A 5422	E903	Red	1.41
56 A 5424	E913	Black	1.41

"LEV-R" SWITCHES



Series 3000. Compact design requires only half the space needed for a lever switch. Silver contacts rated at 3 amps. 300 watts max. AC, non-inductive load. Non-locking types have spring return. ¹³⁄₆₄" mtg. bushing; ⅝" wide; 2¼" behind panel; ¹⁵⁄₁₆" mtg. hole. Type 3034 closes either of two circuits keeping the other open. *Same contact form for both sections on each side of switch. Attractive mounting hardware, and removable black plastic knob. Shpg. wt., 3 oz.

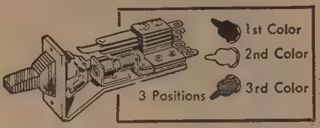
TWO-POSITION TYPES

Mfr's Type	Stock No.		Action	EACH
	Locking Type	Non-Locking Type		
3001	56 A 4471	56 A 4465	SPST	1.35
3003	56 A 4472	56 A 4466	SPDT	1.62
3004	56 A 4473	56 A 4467	DPST	1.77
3006	56 A 4474	56 A 4468	DPDT	1.95
3009	56 A 4484	56 A 4485	3PDT	2.52

*THREE-POSITION TYPES

Mfr's Type	Locking Type	Non-Locking Type	Action	EACH
3033	56 A 4475	56 A 4469	SPDT	1.77
3034	56 A 4459	56 A 4458	DPDT	1.83
3036	56 A 4479	56 A 4478	DPDT	2.04
3037	56 A 4476	56 A 4470	DPDT	2.10

ILLUMINATED LEVER SWITCHES



Series 25000. Illuminated color-coded switches indicate function and/or switch position. Smooth nylon-roller action of the lever assures reliability, dependability, and long life. Replace switch and up to 3 indicator lamps, saving space and wiring costs. Nickel-silver springs. Silver contacts: 3 amps, 300 watts max., AC non-inductive. 1⁷⁄₃₂" high, ³⁹⁄₆₄" wide, 2¼" behind panel. With 6-volt lamp and 6 color chips (blue, red, amber, yellow, green, white). *Same contact form for both sections on each side of switch: 1-A for Type 25201, 25304; 1-C for 25306; 2-A for 25308; 2-C for 25206, 25312; 3-C for 25209. Shpg. wt., 3 oz.

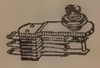
TWO-POSITION TYPES

Mfr's Type	Stock No.		Action	EACH
	Locking Type	Non-Locking Type		
25201	56 A 6280	56 A 6272	SPST	2.76
25206	56 A 6282	56 A 6274	DPDT	3.45
25209	56 A 6283	56 A 6275	3PDT	3.96

*THREE-POSITION TYPES (Center-Off)

Mfr's Type	Locking Type	Non-Locking Type	Action	EACH
25304	56 A 6284	56 A 6276	SPST	3.12
25306	56 A 6285	56 A 6277	SPDT	3.45
25308	56 A 6286	56 A 6278	DPST	3.81
25312	56 A 6287	56 A 6279	DPDT	4.14

"FF" PUSHBUTTON SWITCHES



Non-locking type with rugged flat frame. Fine silver contacts rated 3 amps, 300 W. max. AC non-inductive. Insulated springs are form-free at flex point. One-piece non-locking molded shaft and (black) button allows installation into mounting panel without removing button. ⅜" dia. mtg. shank is ⅜" long. With locknut and washer. Shpg. wt., 3 oz.

Stock No.	Mfr's Type	Action	EACH
56 A 4994	1001	SPST N.O.	.78
56 A 4996	1003	SPDT	.87
56 A 4997	1004	DPST N.O.	.96
56 A 4999	1006	DPDT	1.11
56 A 4969	1009	3PDT	1.59

LAMPS FOR ILLUMINATED SWITCHES

For use with "Littel-Lite" and "NF-Lite" illuminated pushbutton switches, and Series 25000 illuminated lever switches. Wt., 2 oz.

60 A 7359. Type 1768. 6-volt...........92

60 A 7126. Type 336. 28-volt.........1.54

SERIES 41000 LEVER SWITCH

- Requires Just 2⅛" Behind Mounting Panel
- Offers Long-Life Reliability, Multiple Circuitry
- Smallest Telephone-Type Lever Switch Available

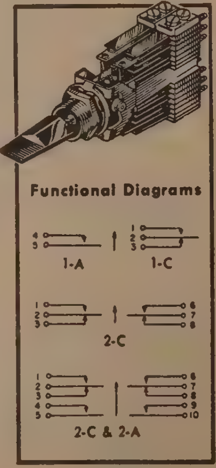
Telephone-type lever switch with welded cross-bar palladium contacts rated 3 amps, 200 watts maximum, AC non-inductive load. For ground support, data processing, control panel, test, communications, instrumentation. Features "U" shaped frame which includes "Can't Cheat" detent guide to prevent accidental actuator bypass of a switching position. Built-in phenolic damping block minimizes transient leaf spring travel. Special long nickel-silver springs have no "form" at point of flex, assure long spring life. Frame provides integral ground terminal. Mounts on ²³⁄₃₂" centers, in ¹⁵⁄₃₂" hole. Size, (including knob), ⅝x¾x3¾". Requires 2⅛" behind mounting panel. Smart paddle-designed knob. In 2- or 3-position types, locking or non-locking. Contact assemblies refer to illustrations at right. *Indicates 3-position switch contacts are for both Pos. 1 and 2. Av. shpg. wt., 1 oz.

TWO-POSITION SWITCHES

Mfr's Type	Stock No.		Contact Assembly	EACH
	Locking Type	Non-Locking Type		
41203	56 A 5775	56 A 5776	1-C	2.52
41206	56 A 5777	56 A 5778	2 C	3.15
41208	56 A 5779	56 A 5780	4-A	3.48
41212	56 A 5781	56 A 5782	4-C	4.26

THREE-POSITION SWITCHES

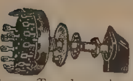
Mfr's Type	Locking Type	Non-Locking Type	Contact Assembly	EACH
41306	56 A 5783	56 A 5784	1-C*	3.15
41308	56 A 5785	56 A 5786	2-A*	3.48
41312	56 A 5787	56 A 5788	2-C*	4.26
41324	56 A 5789	56 A 5790	4-C*	6.30



Mallory and Centralab Switches

MALLORY GANG SWITCHES AND DIAL PLATES

SINGLE-GANG SWITCHES



Compact, enclosed, low-voltage rotary switches. For bandswitching in receivers, transmitters, etc. Have 2" notched shaft; ⅜" threaded bushing, ⅜" long Two base diameters, 1¼" and 1 11⁄16" 1¼" size has 30° indexing, 1 11⁄16" size, 20°. 1 11⁄16" types have adjustable stops. Breakdown rating: 500 VDC or VAC. Max breaking current into res. load: 125 mA @ 300 VDC, 3A @ 6 VDC; 200 mA @ 300 VAC, 5A @ 6 VAC. For use with dial plates listed in right hand column. *Total Poles. Av. shpg. wt., 4 oz.

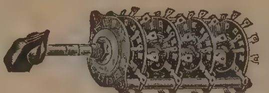
SERIES 3100J SHORTING TYPE

Stock No.	Mfr's Type	*	Positions	Base Dia.	EACH
56 A 4300	3115J	1	5	1¼"	1.13
56 A 4301	31112J	1	12	1¼"	1.13
56 A 4302	3122J	2	2	1¼"	1.13
56 A 4303	3123J	2	3	1¼"	1.13
56 A 4304	3126J	2	6	1¼"	1.13
56 A 4305	3134J	3	4	1¼"	1.17
56 A 4306	3142J	4	2	1¼"	1.17
56 A 4307	3143J	4	3	1¼"	1.17
56 A 4308	31117J	1	2-17	1 11⁄16"	1.73
56 A 4311	3163J	6	2 3	1 11⁄16"	1.83

SERIES 3200J NON-SHORTING

56 A 4350	3215J	1	5	1¼"	1.13
56 A 4351	32112J	1	12	1¼"	1.13
56 A 4352	3222J	2	2	1¼"	1.13
56 A 4353	3223J	2	3	1¼"	1.13
56 A 4354	3226J	2	6	1¼"	1.13
56 A 4355	3234J	3	4	1¼"	1.17
56 A 4356	3242J	4	2	1¼"	1.17
56 A 4357	3243J	4	3	1¼"	1.17
56 A 4358	32117J	1	2-17	1 11⁄16"	1.73
56 A 4359	3229J	2	2 9	1 11⁄16"	1.73
56 A 4360	3236J	3	2-6	1 11⁄16"	1.83
56 A 4361	3263J	6	2-3	1 11⁄16"	1.83

MULTI-GANG SWITCHES



Versatile switches recommended for test equipment, meter switching and all types of low current applications. Heavily silver-coated contacting members have self-cleaning, contact-wiping action. 1 fixed and 1 adjustable stop, solid silver rotor contact slugs and phosphor-bronze springs. 3- and 4-gang types spaced 1"; all others, ½". 2" notched shaft. Shorting types make before break. Require 7⁄16" mtg. hole. With bar knob and hardware, less mtg. plate (use **56 A 4600 C** plates at right). *Additional "off" positions with all circuits open. †Total Gangs. Av. shpg. wt., 8 oz.

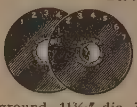
SERIES 1200L SHORTING TYPE

Stock No.	Mfr's Type	†	Total Poles	Pos./Pole	EACH
56 A 4201	1211L	1	1	2-11	2.33
56 A 4206	1221L	2	2	2-11	2.87
56 A 4207	1225L*	2	4	2 5	2.87
56 A 4214	1241L	4	4	2 11	4.24

SERIES 1300L NON-SHORTING TYPE

56 A 4251	1311L	1	1	2-11	2.33
56 A 4252	1315L*	1	2	2-5	2.33
56 A 4253	1313L*	1	3	2-3	2.33
56 A 4256	1321L	2	2	2-11	2.87
56 A 4257	1325L*	2	4	2 5	2.87
56 A 4258	1323L*	2	6	2 3	2.87
56 A 4261	1331L	3	3	2 11	3.60
56 A 4264	1341L	4	4	2-11	4.24
56 A 4265	1345L*	4	8	2-5	4.24
56 A 4266	1351L	5	5	2-11	4.57
56 A 4267	1356L	5	10	2-6	5.04
56 A 4268	1361L	6	6	2-11	5.37

DIAL PLATES

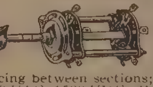


Wide selection of dia plates for switches, po tentiometers and rhe stats. Designed for u with Series 1200L, 1300L, and for 3100J and 3200 with 1¼" bases. Etche aluminum. Black back ground. 1 13⁄16" dia. 7⁄16" hole. Shpg. wt., 1 oz.

Type	Marking	Type	Marking
372	1 to 2	382	1 to 2
373	1 to 3	383	Off 1 to 3
374	1 to 4	384	Off 1 to 4
375	1 to 5	385	Off 1 to 5
376	1 to 6	386	Off 1 to 6
377	1 to 7	387	Off 1 to 7
378	1 to 8	388	Off 1 to 8
379	1 to 9	389	Off 1 to 9
380	1 to 10	390	Off 1 to 10
381	1 to 11	.	...

56 A 4600 C, Specify Type.......Each .2

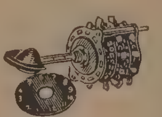
151L "HAMSWITCH"



For switching a single meter betwee 1 to 5 circuits. sections, 5 positio —1 pole per sectio Non shorting; 2¼ spacing between sections; 60° indexing. Rate 1000 VAC, 1500 VDC. 3½" mtg depth. ⅜x¾ bushing, 2x¼" shaft. With knob, nut, lock washer. Shpg. wt., 6 oz

56 A 4318........................Each 3.0

13124L 24-POINT TAP SWITCH

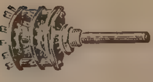


Single circuit, 24 position non-shorting switch. ⅜" bushing 2" grooved shaft. Knob dial plate, hardware Shpg. wt., 6 oz.

56 A 4295........................Each 3.07

CENTRALAB ROTARY AND LEVER SWITCHES

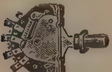
MINIATURE PHENOLIC SWITCHES



PA-1000 Series. Rated 2.75 amps @ 15 VDC, 230 mA @ 115 VAC. 30° indexing adjustable stop. 1½x1 7⁄16" diameters; ½" spacing between sections. Shaft, 2¼" FMSx¼"; bushing ⅜x⅜". With 1¼" pointer knob and mtg. hdwe. 3 oz.

Shorting		Non-Shorting		Sections	Total Poles	Pole Pos.	EACH
Stock No.	Type	Stock No.	Type				
56 A 5050	1000	56 A 5065	1001	1	1	2-11	2.08
56 A 5051	1002	56 A 5066	1003	1	2	2-5	2.08
56 A 5052	1004	56 A 5067	1005	2	2	2-11	2.96
56 A 5053	1006	56 A 5068	1007	1	3	2-3	2.08
56 A 5054	1008	56 A 5069	1009	3	3	2-11	3.76
56 A 5055	1010	56 A 5070	1011	1	4	2	2.08
56 A 5056	1012	56 A 5071	1013	2	4	2-5	2.96
56 A 5059	1018	56 A 5074	1019	2	6	2-3	2.96
56 A 5060	1020	56 A 5075	1021	3	6	2-5	3.76
56 A 4975	1024	56 A 5077	1025	2	8	2	2.96
56 A 5063	1026	56 A 5078	1027	4	8	2-5	4.38

LEVER-ACTION PHENOLIC SWITCHES

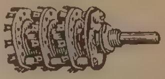


Budget-priced phenolic-insulated switches featuring nylon rotor design. Rated 2.75 amps at 15 VDC, 230 mA at 115 VAC. Silver-plated clips and contacts. 1⅞x7⁄16" (1¼" behind panel). Mtg. bracket has two 6-32 tapped holes. With knob, hardware. 4 oz.

Shorting		Non-Shorting		Poles	Positions	Action	EACH
Stock No.	Type	Stock No.	Type				
56 A 4021	1452	56 A 4026	1454	2	3	Positive	1.60
....	......	56 A 4027	1455	2	3	Moment.	1.60
56 A 4023	1466	56 A 4028	1467	2	3	Pos./Mom.	1.60
56 A 4025	1456	56 A 4030	1457	4	2	Moment.	1.78
56 A 4024	1459	56 A 4029	1458	4	2	Positive	1.78

> Because we are the largest electronics distributor in the world, we stock more complete lines of the following manufacturers: Cutler-Hammer, George Risk Industries, Ohmite, Alco, Arrow-Hart, Rowan, Centralab, Grayhill, Robertshaw, Switchcraft, JBT, Hamlin. For prompt quantity-price quotations, write us. Our professionally trained staff will promptly and courteously expedite your order. With Allied you always get quick service and low prices.

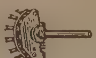
MINIATURE STEATITE SWITCHES



PA-2000 Series. Ceramic rotary switches Rated 2.75 amps @ 15 VDC, 230 mA @ 11 VAC. 1½x1 7⁄16" dia.; ½" spacing between sec tions. 30° indexing. Shaft 2¼" FMS long, ¼ dia.; bushing ⅜"-32 thread, ⅜" long. §2042 has 1 off and 9 progressive shorting pos. Adjustable stop. With 1¼ pointer knob, hdwe. *Switch sections. †Total Poles. Av. wt., 3 oz

Shorting		Non-Shorting		*	†	Pole Pos.	EACH
Stock No.	Type	Stock No.	Type				
56 A 5095	§2042	....	......	1	1	2-10	2.50
56 A 4900	2000	56 A 4921	2001	1	1	2-0	2.76
56 A 4901	2002	56 A 4922	2003	1	2	2-6	2.76
56 A 4902	2004	56 A 4923	2005	2	2	2-12	3.90
56 A 4903	2006	56 A 4924	2007	1	3	2-5	2.76
56 A 4904	2008	56 A 4925	2009	3	3	2-12	4.98
56 A 4905	2010	56 A 4926	2011	2	4	2-6	3.90
56 A 4906	2012	56 A 4927	2013	4	4	2-12	5.98
....	......	56 A 4928	2015	1	5	2-3	2.76
56 A 4908	2016	56 A 4929	2017	5	5	2-12	7.16
....	......	56 A 4930	2019	1	6	2	2.76
56 A 4910	2020	56 A 4931	2021	2	6	2-5	3.90
56 A 4911	2022	56 A 4932	2023	3	6	2-6	4.98
56 A 4914	2024	56 A 4933	2025	6	6	2-12	8.32
56 A 4913	2026	56 A 4934	2027	4	8	2-6	5.98
....	......	56 A 4935	2029	3	9	2-5	4.98
56 A 4916	2030	56 A 4936	2031	2	10	2-3	3.90
....	......	56 A 4940	2039	3	15	2-3	5.64
....	......	56 A 4941	2041	3	18	2	5.64

UNIVERSAL AND INTERCOM SWITCHES



Phenolic-insulated rotaries. Cadmium-plated. Breakdow 1000 VAC. Rated 2.75 amps at 15 VDC, 350 mA at 11 VAC. Non-shorting; 30° indexing. Shaft, 1⅞x¼" dia Bushing. ⅜"-32 thread ⅜" long. *1" or †¾" behind panel §Positive in 2 pos., spring return in 3rd. With knob. Shpg. wt., 5 oz

Stock No.	Type	Description	EACH
56 A 4085	1450†	4PDTD	1.74
56 A 4087	1451†	4PDT, spring-return	2.52
56 A 4054	1488*	6P, 3 pos., spring-return	3.78
56 A 4055	1489*§	6P, 3 pos.	3.78

Intercom and Radio Switches. Phenolic, cadmium-plated switches Same ratings and shafts as above. Silver-plated spring brass clips. Bot †shorting and *non-shorting types. 1472 is for AM-FM-phono selector. Av. shpg. wt., 2 oz.

56 A 4080	1460†	SPST phono-radio switch	1.14
56 A 4081	1461†	SP-3-position selector	1.14
56 A 4082	1462†	DPDT bandswitch	1.14
56 A 4083	1463*	SPDT spring return	1.14
56 A 4084	1464*	DPDT spring return	1.14
56 A 5235	1472*	DP 3-position	1.14

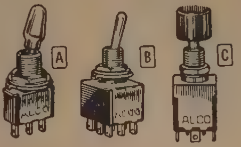
Miniature, Slide, Reed and Foot Switches

ALCOSWITCH MINIATURE SWITCHES AND ACCESSORIES

TOGGLE SWITCHES

Only ½″ Square • Solid Silver Contacts

iniature switches for high-density applications ace is at a premium. Meet high standards of qual- silver contacts carry a full 5 ampere-rating at 115 . Insulation rating test, 1000 megs at 500 volts DC. s listed have breakdown ratings of 1000 volts at 60 mounting bushings. *Momentary contact. †Special ith 3 "On" positions. ‡"On-None-On" configuration. -On" positioning. 30° throw. With or without cap. pan. Av. shpg. wt., 1 oz.



WITH WHITE PLASTIC CAP

k	Type MST-	Action	EACH
201	115D	SPDT‡	1.70
202	215N	DPDT‡	2.20
203	315D	3PDT‡	3.90
204	415N	4PDT‡	4.90

B WITHOUT PLASTIC CAP

205	105D	SPDT‡	1.65
206	105E	SPDT§	1.95
207	105F	SPDT*‡	1.95
208	105G	SPDT*‡	1.95
209	105H	SPDT*§	1.95

WITHOUT PLASTIC CAP (Cont'd)

Stock No.	Type MST-	Action	EACH
56 A 3210	205N	DPDT‡	2.15
56 A 3211	205P	DPDT§	2.55
56 A 3212	205R	DPDT*‡	2.55
56 A 3213	205S	DPDT*	2.55
56 A 3214	205T	DPDT*	2.55
56 A 3217	205PA	DP3T†	2.85
56 A 3238	205TA	DP3T*†	3.15
56 A 3215	305D	3PDT‡	3.85
56 A 3235	305E	3PDT§	4.15
56 A 3236	305H	3PDT*§	4.15
56 A 3216	405N	4PDT‡	4.85
56 A 6408	405P	4PDT§	5.35

0 COLORED PLASTIC CAPS R ABOVE TOGGLE SWITCHES

identification asy with bright plastic caps. le in white, red, r blue. 25 per Specify color. wt., 2 oz. per

tock No.	For MST-	Per Pkg. of 25
3237 C	-105 Series	.70
3227 C	-115 Series	.70

C PUSHBUTTON SWITCH AND RED OR BLACK BUTTONS

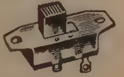
Usable normally open or normally closed, 5 amps at 115 volts AC. All types listed have solid silver contacts. Size, ½x½x¾″. *Momentary contact. †Push on/off. Order buttons separately, below. Av. shpg. wt., 1 oz.

Stock No.	Type MSP-	Action	EA.
56 A 3248	105F	SPDT*	1.95
56 A 3249	205R	DPDT*	2.85
56 A 3297	205N	DPDT†	2.85
56 A 3298	C-12 Black Button	Pkg. of 25	.90
56 A 3299	C 12 Red Button	Pkg. of 25	.90

CONTINENTAL-WIRT

STANDARD SLIDE SWITCHES

AC-DC, for transmitters, receivers, etc. Cadmium-plated steel housing. Solder-lug terminals. Dimensions, 35/64x1 13/32″. ■U.L. Recog. Av. shpg. wt., 3 oz.



Stock No.	Mfr's Type	Action	Amps @ 125V	EACH
56 A 5917	G 141	DP4T	0.5	1.00
56 A 5023	GF 323	SPST	3.0	.50
56 A 5025	GF 324	SPDT	3.0	.50
56 A 5920	GF 325	DPST	3.0	.50
56 A 5921	GF 326	DPDT	3.0	.50
56 A 5039	GH 328	DP3T	3.0	.50
56 A 5032	G 338L	DP4T	3.0	1.00
56 A 5036	GF 342	4PDT	3.0	1.00
56 A 5913	GG 350	DPDT	3.0	.50
56 A 5915	GH 360	4P3T	3.0	1.50
56 A 5918	GF 361	3PDT	3.0	1.00
56 A 5914	GH 368	3P3T	3.0	1.00
56 A 5026	GF 623	SPST	6.0	.50
56 A 5027	GF 624	SPDT	6.0	.50
56 A 5033	GF 625	DPST	6.0	.50
56 A 5084	GF 626	DPDT	6.0	.50
56 A 5022	GF 1123	SPST	11.0	.50

SWIDGET SUBMINIATURE SWITCHES

Standard Swidgets fit into approximately ⅓ the volume of a conventional slide switch, while Swidget, Jr. occupies less than 1/5 the volume. Actuating force, 8-32 oz., except G 111, 5-20 oz. Rated 0.5 A AC-DC at 125 V. Dielectric strength, 900 VAC, 60 Hz for one minute. G 124, G 126, 1x1 3/32″; G 128 L, 1 3/16x1 3/32″. G 111, 49/64x5/16″. ■U.L. Recog. Av. wt., 3 oz.

Stock No.	Mfr's Type	Action	Amps @ 125 V	EACH
56 A 5916	G 111	SPDT	0.5	1.25
56 A 5034	G 124	SPDT	.05	.50
56 A 4424	G 126	DPDT	0.5	.75
56 A 5035	G 128L	DP3T	.05	.75

DRY REED SWITCHES

k	Mfr's Type	Form	Size, Dia. x Lgth.	Max. DC Contact Watts	Max. Amps	Max. DC Volts	Actuating Magnet	EACH
603	MRR-2-185	A	.130x.800″	10	.5	200	H-33	1.15
605	MSRR-2-185	A	.090x.800″	10	.5	200	H-33	1.15
606	MTRR-2-185	A	.092x.635″	3	.250	100	H-33	1.32
607	MRG-DT-175	C	.130x.610″	3	.250	28	H-33	4.20
608	MMRR-2-185	A	.090x.375″	1	.010	28	H-31	1.84
609	DRG-2-425	A	.210x1.950″	15	1.0	250	H-34	.79
610	DRR-1-425	A	.210x1.950″	15	1.0	400	H-34	.89
611	DRT-5-425	A	.210x1.950″	50	3.0	1000	H-34	2.10
612	SRR-2-425	A	.195x1.425″	15	1.0	400	H-32	.89
613	DRG-DTH-445	C	.218x1.562″	10	.5	250	H-32	2.63
614	DRVT-10-658	A	.218x1.950″	50	3.0	5000	H-34	4.20

MERCURY-WETTED REED SWITCHES

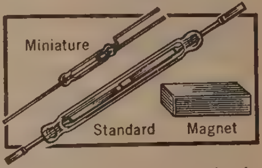
ck	Mfr's Type	Form	Size, Dia. x Lgth.	Max. DC Contact Watts	Max. Amps	Max. DC Volts	Actuating Magnet	EACH
616	HRC-1-535	A	.218x1.950″	50	3.0	400	H-34	2.10
617	MRC3-387	A	.130x.710″	28	1.0	100	H-33	4.20

MAGNETS FOR ABOVE SWITCHES

ck	Mfr's Type	D. x L.	EACH	Stock No.	Mfr's Type	D. x L.	EACH
618	H-31	1/16x1/16x½″	.30	56 A 6620	H-33	⅛x⅛x¾″	.30
619	H-32	3/16x3/16x1″	.35	56 A 6621	H-34	¼x¼x1″	.40

HAMLIN MAGNETIC REED SWITCHES

- Hermetically Sealed
- Actuating Time—One ms or Less
- Life—10,000,000 Operations
- High Sensitivity
- Compact Size



Premium-quality dry reed and mercury wetted switches for reliable operation under all operating conditions. They are hermetically sealed for safe, dependable use in any type of atmosphere or even under explosive conditions. Switches are unaffected by high or low temperature extremes or pressure.

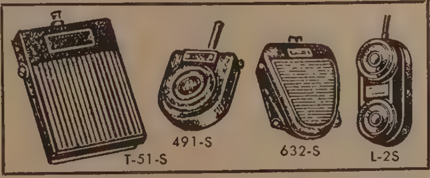
Compact size, high sensitivity and rapid cycling rate make them ideal for applications in position indicators, counting instruments, limiting switches, flow meters, commutating instruments and reed relays. Fully inspected.

Actuating time of one millisecond or less. Dry reed switches have life expectancy of ten million operations; mercury wetted switches have life expectancy of one billion operations. All switches may be actuated by permanent or electro magnets. Order optional permanent magnets from the table listed at left. Average shpg. wt. per switch, 1 oz.

LINEMASTER FOOT SWITCHES

l 491-S. Lightweight, mo- ry-contact switch with contacts rated 10 amps V, or 230 V, AC. Steel g, skidproof base. 2⅞x ½″. Wt., 7 oz.
5685................3.25

l 491-SC. Above, but -ft. cord and 2-prong se- ug. 1¼ lbs.
5686................5.00



l 632-S "Clipper." Mo- ary-contact industrial . SPDT contacts rated 20 at 125 150 VAC. Cast iron housing has r anti-skid pad, black wrinkle finish. Size, ½x1½″. Shpg. wt., 2¼ lbs.
6687..........................8.25

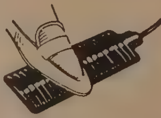
6689. Model L-2S "Lektro-Lok." 15- 125 VAC contacts on each side. Teeter- principle. Interlock prevents operating ircuits at once. Steel. 1 lb.........5.80

Model T-51-S. Compact switch for low current loads. SPDT momentary-contact switch rated 7 amps at 110-250 volts. Has skidproof rubber base. 1x2⅝x½″. Shpg. wt., 7 oz.
56 A 6683..............................2.75

Model T-51-SC. Same as above, except with 6-ft. cord and 2-prong series plug. 15 oz.
56 A 6684..............................4.00

TAPESWITCH FOOTSWITCHES

- Operates Doors, Other Devices
- Easy to Operate
- Weatherproof
- Installed Anywhere

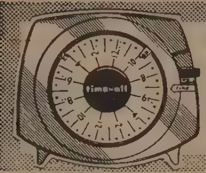


Type 111 100-Watt Footswitch. Easy to install, convenient and safe to use. Uses Controflex ribbon switches (momentary, normally open) sealed in weatherproof, molded flat pad. Size, 2x5x¼″ thick. Footswitch can be taped or cemented to the floor. With 6-ft. U.L. Listed line cord. Shpg. wt., 8 oz.
56 A 6681.......................**Each 3.80**

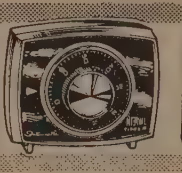
You Can Depend on Allied
for All Your Electrical Needs

cognized Under the Component Program of Underwriter's Laboratories, Inc.

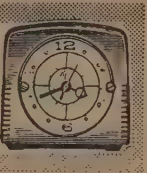
Intermatic Timers and Photoelectric Controls



Automatically Turns Lights On or Off
- U.L. Listed
- Handles Loads of 1875 Watts



PT-301



A501

"TIME-ALL" MODEL A911-6
AUTOMATIC APPLIANCE TIMER

You can easily set the "Time-All" to turn lights and appliances on and off at times you designate. The minimum "on" time is 15 minutes; maximum "on" time is 23¾ hours. Can be set to skip operation for a day or longer. Device to be controlled plugs into AC outlet on back of timer. Has manual control with automatic reset. Timer handles 15-amp, 1875-watt load. With 6-ft. cord, plug. Champagne White Plaskon case. 5x4x2½". U.L. Listed. 110-120 V, 60 Hz AC. Shpg. wt., 2 lbs.

58 A 8311 .... 8.64

MODEL A921-6. Same as above, but designed to handle 7-amp, 875-watt load. For light duty applications, as control of music systems, house, garage, or yard lights, and most smaller electrical appliances. Dove Gray Plaskon case. Shpg. wt., 2 lbs.

58 A 8397 .... 7.97

PORTABLE INTERVAL TIMERS

MODEL PT-301. Convenient and easy to use. Automatically shuts off lamps, sterilizers, etc. Time range: 0-60 min., 1 min. minimum. 15 amps, 1875 watts. Cycolac® case. 110-120 V, 60 Hz AC. 5x4x3". Wt., 2 lbs.

58 A 8821. 1-5 Each **7.29** 6-Up Each **6.57**

MODEL PT-304. Similar to above except time range span is 0-24 hrs. minimum setting 30 minutes. 5x4x3". Wt., 2 lbs.

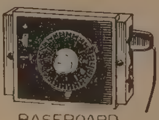
58 A 8822. 1-5 Each **7.29** 6-Up Each **6.57**

MODEL A501 MUSIC-MINDER

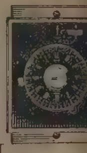
Electric clock with Sleep Switch and Buzzer Alarm. Lets radio play up to 60 minutes before automatically shutting it off. Automatically turns radio on again in morning. Buzzer alarm sounds 10 minutes later to ensure arousing heavy sleepers. AC outlet on back takes 1875-watt load (15 A). Plaskon case. 6-ft. cord. 4½x4¾x2¼". U.L. Listed. 110-120 V, 60 Hz AC.

58 A 8267. Wt., 2 lbs. **8.64**

"TIME-ALL" IN WALL AUTOMATI
TIMERS WITH A BUILT-IN LOOK



BASEBOARD MOUNT

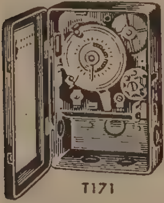


WALL MOUNT

- Control lights, appliances, everything
- Full 24 hour timer resets automaticall
- Override switch allows manual contro

In wall Time-All automatic timers moun
wall switch or outlet box—so easy to ins
you can do-it-yourself. Provides automa
control of circuits for lamps, ceiling or
fixtures, appliances, air conditioners, eve
thing electrical up to a maximum load
1875 watts at 15 amps. Override swi
allows manual control.

Great for stores and offices to control
play lighting. Discourages prowlers w
you're away from home. Full 24 hour ti
resets itself automatically. Minimum
time, 15 min.; maximum off time, 23 ho
45 min. 5⅛x3$^{11}/_{16}$x2¼". Requires minim
2x3x2" box. 120 VAC. U. L. Listed.
58 A 8309. Model E-1010. Wall switch
stallation. Wt., 1½ lbs. 7
58 A 8308. Model E-1012. Baseboard
counter installation. 1½ lbs. 9



T171

"SKIPPER" TIME SWITCHES

Handle up to 12 on-off operations. Can be set to skip one or more days

Permit "skipping" control cycle. Have two dials: a time dial and a day dial. Days are skipped by inserting small skipping screws into day dial. "On" and "off" trippers are set in time dial. Special "cutout" tripper advances the day dial every 24 hours. Up to 12 operations per day can be obtained by adding trippers. Range: minimum "on" or "off," 1 hour; maximum 23 hours. Silver contacts rated 40 amps (4375 watts, tungsten) at 125 V. 7¾x5x3". U.L. Listed. For 110-120 V, 60 Hz AC. Shpg. wt., 3 lbs.

Stock No.	Type	Action	EACH
58 A 8315	T171	SPST	12.97
58 A 8316	T173	DPST	14.27
58 A 8317	T175	SPDT	14.27

TRIPPERS AND SKIPPING SCREWS

TYPE 107T19GR. "On" Cutout Trippers. For "Skipper" switches only. Shpg. wt., 3 oz.

58 A 8319 .... Each .33

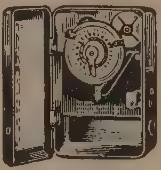
TYPE 79T8A. Skipping Screws. For "Skipper" switches only. Shpg. wt., 8 oz.

58 A 8364 .... 2 for .13

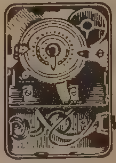
TYPE 107T8A. "On and Off" Trippers. For all switches except T185 at right.

58 A 8324. Shpg. wt., 2 oz. .... Per Set .33

TIME SWITCHES



T101



P101

TYPE T101 TIME SWITCH

SPST time switch turns equipment on and off once in 24 hours. Can be activated up to 12 times a day with extra trippers (use Type 107T8A listed at the lower left of page). Minimum time between settings is one hour. Long-lasting Alloy-T contacts resist pitting and welding. Motor is visible for inspection. Contacts handle 40 amps (4375 watts, tungsten rated) at 125 volts. Size, 5x3x7⅞". U.L. Listed. For 110-120 V, 60 Hz AC. Shpg. wt., 3 lbs.

58 A 8322 .... 9.72

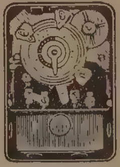
TYPE T103. As above, but DPST.

58 A 8321 .... 11.02

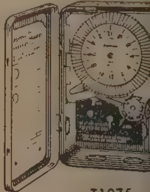
TYPE P101 TIME SWITCH

Portable, SPST plug-in time switch has numerous applications. Easily set for from 1 (as is) to 12 on-and-off operations per day when used with extra 107T8A trippers, (listed at left). Minimum on or off time, 1 hour; maximum, 23 hours. Can also be manually operated. 10 amps at 125 volts. Size, 5x3x7⅞". U.L. Listed. For 110-120 V, 60 Hz AC. Shpg. wt., 4 lbs.

58 A 8314 .... 11.02



T185



T1975

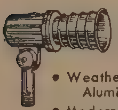
TYPE T185 TIME SWITCH

Provides up to 12 on-and-off cycles da
with extra trippers (listed below). Each
cle is independently controlled and can v
from 5 to 60 minutes. Minimum inter
between cycles, 1¾ hours. Can be used
SPST normally open, SPST norm
closed, or SPDT. The perfect switch for
plications requiring more than one on-a
off cycle of the same or different durat
within a 24-hour period. Rated 40 a
(4375 watts, tungsten rated) at 125 V. S
plied with 3 trippers. 7¾x5x3" .U.L Lis
For 110-120 V, 60 Hz AC.
58 A 8313. Shpg. wt., 4 lbs. 13
EXTRA TRIPPERS. For above. Shpg. wt., 4
58 A 8336 .... Each 1

TYPE T1975 PROGRAM TIMER

96 trippers for 48 on-and-off operations
ery 24 hours. Minimum interval, 15 minu
Has "skipper" feature for omitting ope
tion on selected days. SPDT switch, ra
20 amps at 125 V. Industrial-type mo
U.L. Listed. 7¾x5x3". For 110-120 V,
Hz AC. Shpg. wt., 3¾ lbs.
58 A 8378. 24

INDOOR-OUTDOOR PHOTOELECTRIC LIGHT-CONTROL DEVICES



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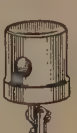


B

- Weather-Resistant Aluminum Housings
- Modern, Dependable Printed Circuits
- Operate from Artifical or Natural Light

Turn lights on at dusk, off at dawn automatically. Modern printed circuits, housed in aluminum. Self-cleaning lens and moisture-proof photocell. Handle tungsten, mercury vapor, or fluorescent lights.

A **MODEL K1611.** Complete photocell and Par lamp holder in one unit. External switch leg provides instantaneous control of other light clusters. 1000 watts. For 125 V, 60 Hz AC. Shpg. wt., 1 lb.

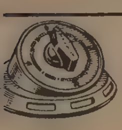
58 A 8337 .... 11.02

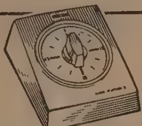
B **SERIES K1100.** Adjustable stem perm
mounting angle to 80°. Light select
louvers handle tungsten mercury vapor
fluorescent lights. (2 FC on; 5 FC off). 1
watts. Shpg. wt., ½ lb.
58 A 8341. K1100. 105-130 V 13
58 A 8797. K1122. 208-240 V 13

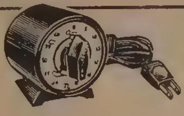
SERIES K1111. As above, but 650 watts.
58 A 8345. K1111. 105-130 V 12
58 A 8798. K1112. 208-240 V 12

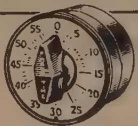
ᶦimers for New Convenience in Home and Shop

MARK-TIME AUTOMATIC TIMER AND TIME SWITCHES

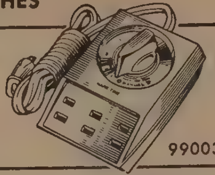

29001


22501


78105



74701


99003

29001 Bell Timer. Spring-driven timer accurately times als up to 60 minutes. Bell rings at end of timing interval. molded-plastic finish. Size, 2½x4⅜" dia. Wt., 10 oz.
3380. 1-11........Each 2.96 12-up.....;.........Each 2.63

22501 Long Ring Bell Timer. Spring-driven timer. Times in- s up to 60 minutes with loud, clear bell tones. Excellent for en, office or laboratory. Stands on a table or easily mounts on a Bracket furnished. Beige finish. 2x2x2". 10 oz.
3258. 1-11........Each 4.46 12-up..............Each 3.97

78100 Time Switches. Turn-off devices after preset time. Have eceptacle. *For timing developers, enlargers, etc.; adjustable for repeat settings; has "hold" feature. Rated at 10 A, 125 3⅜x3¾x3½". For 110-120 V, 60 Hz AC. Wt., 1 lb.

k No.	Type	Maximum Setting	Ea., 1-11	Ea., 12-Up
A 8264	78174*	60 Seconds	7.46	6.33
A 8265	78104	30 Minutes	7.13	6.33
A 8263	78105	60 Minutes	7.13	6.33
A 8266	78126	12 Hours	7.13	6.33

ard-Built-In Time Switches. Easily set for "off-type" or "on- use. Easy to install. With hardware. Rated at 20 amps, 125- AC. U.L. Listed.

k No.	Type	Timing Range	Dia. x Depth	Oz.	EACH
8259	74701	0 to 15 min.	2 9/16x1 19/32"	9	6.38
8261	74702	0 to 30 min.		9	6.38
8268	74703	0 to 60 min.		9	6.38

MODEL 99003 "ALL IN ONE" TIME SWITCH

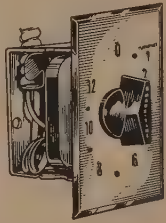
- Consists of Time Switch, Extension Cord, 3-Way AC Outlet
- Automatically Turns Off Devices After Up to 4 Hours
- Convenient "Hold" Feature • Rated 10 Amps, 125 VAC

Ideal for controlling TV sets, lamps, radios, etc. Insert plug into any wall outlet; plug up to 3 devices into outlet; and set knob for desired time cycle up to 4 hrs. After predetermined time has passed, switch automatically shuts devices off. In "hold" position, devices remain in operation. SPST switch, rated 10 amps, 125 VAC. Cream base; brass-finished dial plate. Has 5½-foot cord. For 110-120 V, 60 Hz. AC. Shpg. wt., 1 lb.
58 A 8294. 1-11........Each 5.96 12-up..............Each 5.30

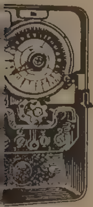
WALL-BOX TIME SWITCHES

Fit std. wallbox. Replaces light switch. Automatically turns off after preset time. 20 amps, 125 V. *"Hold" feature for continuous use. C.S.A. Listed. 117 VAC. 9 oz.

Stock No.	Mfr's Type	Max. Setting	EACH 1-11	EACH 12-Up
58 A 8269	90004	5 Minutes	5.63	5.00
58 A 8270	90005	15 Minutes	5.63	5.00
58 A 8274	90006	30 Minutes	5.63	5.00
58 A 8275	90021*	3 Minutes	5.63	5.00
58 A 8276	90024*	60 Minutes	5.63	5.00
58 A 8277	90015*	12 Hours	5.63	5.00



PARAGON MULTI-PURPOSE TIME CONTROLS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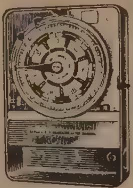
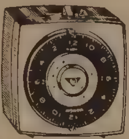
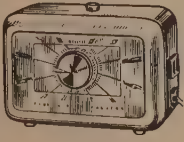
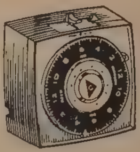

7000


APT15-0


AT45-0



000 SERIES 24-HOUR CONTROLS

7 on-off operations per day—1½-hour mum between settings. Double pole switches 9600 watts on 3-wire load. p-A-Day" feature (on 4003-OS and -OS) eliminates operation for preselect- ays. 40 amps. U.L. Listed. 7 13/16x4⅛x ". 110-120 volts, AC. 2½ lbs.
8000. Type 4001-O. SPST.........9.72
8002. Type 4003-OS. DPST.......14.27
8003. Type 4005-OS. SPDT.......14.27

'000 SERIES 7-DAY CONTROLS

xe version of above. 28 on-off combina- per week or 4 per day—3-hour mini- between operations. Permits up to 4 matic "On-Off" operations at different s each day. You can omit one or more completely if desired. T-rated action amps for Type 7007-0, 4PST, and 40 s non-inductive on 7008-0, 2 N.O.— C. U.L. Listed. 10⅞x7⅜x3⅝". 110-120 0 Hz. AC. Shpg. wt., 6½ lbs.
8013. Type 7007-0. 4 N.O.......22.39
8014. Type 7008-0. 2N.O.-2N.C..22.39

APT15-0 HOUSEHOLD TIMER

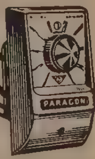
e to fresh, hot coffee—let music lull to sleep. You decide on and off time— r doesn't forget. Skip a schedule with- resetting. Makes virtually all home ap- nces automatic. 1800-watt capacity. and C.S.A. Listed. 4⅜x4⅜x2¾". For 120 V, 60 Hz. AC. Wt., 2 lbs.
8055.........................8.88

AT45-0 INTERVAL TIMER

Excellent for sun lamps, vibrator pillows, heating pads, cooking appliances, and lab equipment. Buzzer signals end of timed period. Use with or without buzzer. One minute dial graduations for setting accuracy. Simple friction setting. Time range 0-60 minutes. 3⅜x5⅛x2 3/16". 1600 watt capacity. U.L. Listed. With 4-foot cord set. 110-120 V, 60 Hz. AC. 1½ lbs.
58 A 8008.........................10.64

Model AT3160-O. As above, without buzzer. 840-watt capacity. 2⅝x4⅛x2⅜". 1¼ lbs.
58 A 8009.........................7.29

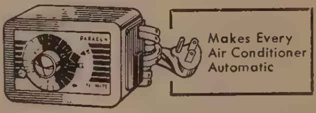
FA-FF SERIES FLUSH-MOUNT TIMER



For attic or window fans, yard lights, small air conditioners, or other applications where permanent control installation is desired. Designed to mount in a standard single outlet box, like a light switch. Handsome molded ivory wall plate has gold dial with black numerals, and a gold knob. Available in *15 min., †60 min., and ††20 hr. time ranges, ¾ hp rated. Size, 4½x2¾x1 3/16". For 110-120 volt, 60 Hz. AC. Wt., 12 oz.
58 A 8010. Type FF15-0.*............6.47
58 A 8011. Type FF51-0.†............6.47
58 A 8012. Type FA51-0.††...........6.47

DELUXE HOME AUTOMATIC TIMER WITH RANDOM OFF

Model ART 13-0. Advanced-design automatic timer features exclusive Random-Off button to vary the daily off time by ½-hour earlier and later for a more realistic "at home" appearance. Controls lights, appliances up to 840 watts, 7 amps. Easy to set or change. Manual control maintains a permanent on or off setting. Decorator styled to blend with your home decor. 4⅜x4⅜x2¾". U.L. and C.S.A. Listed. 120 VAC.
58 A 8306. Shpg. wt., 2 lbs..........9.88
58 A 8307. Model PRT 17-0. Same as above, but with photocell to turn lights on automatically at dusk. Wt., 2 lbs........14.88



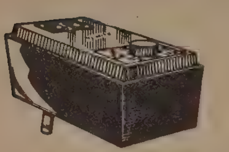
Makes Every Air Conditioner Automatic

TYPE AC AIR CONDITIONER TIMERS

Turns air conditioners on and off automatically. Time ON and time OFF are set on 24-hour dial. Minimum time between ON and OFF settings is 2 hours. SPST switch contacts rated 12 amps full load at 120 V and 240 V, 60 Hz AC. Four no-mar feet for desk use, 2 holes on backplate for wall mounting. Beige case, 2⅝x4⅛x2⅜". With 5-ft. cord, right-angle grounding plug, 3-wire grounded receptacle. Wt., 1¾ lbs.
58 A 8810. Type AC1-0. 120 V.......10.88
58 A 8811. Type AC4-20. 208-240 V..11.88

Timers, Time Switches, Clocks and Counters

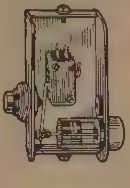
PARAGON PLTI-O TI MITE TIMER



- Turns Lights On/Off Every Evening
- Cuts Wasteful All Night Lighting
- Plugs Directly into Wall Outlet

Automatic home lighting control gives your home a "lived in" look that discourages prowlers when you are away. Easy to set and change for year-round lighting needs. Simply line up desired ON-time on knob with correct time of day. Plug timer into nearest outlet. Plug lamp into timer. Lights will automatically go ON at selected time and OFF five hours later. Timer repeats this ON-OFF schedule once every 24 hours. Convenient as your nearest outlet. Eliminates cord clutter. Compact design allows operation of other appliances at the same wall receptacle. 300 watts capacity (lighting only). Black with grey case. 3⅝x2⅜x2". For 120 V, 60 Hz AC.
58 A 8015. Shpg. wt., 10 oz. 5.88

MAGNECRAFT CLASS 113 TIME DELAY SWITCH

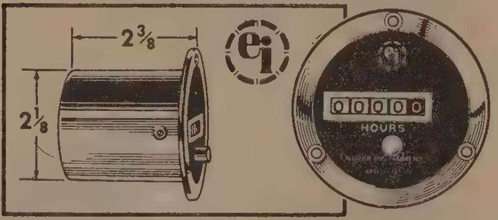


- Ideal for Consumer Control Applications
- All Metal Parts Are Corrosion Resistant
- Timing Fully Adjustable to Two Minutes

Air dashpot time delay switch built of n aging, low friction graphite and precis ground, tempered glass. All metal parts corrosion resistant. When pushbutton is pres snap switch is activated. Timing cycl initiated when pushbutton is released. At of timing period, output contacts are instan reset, ready for another timing cycle. Rate 10 amps. Insulation to ground: 100 VAC, standard. Shpg. wt., 8 oz.

Stock No.	Mfr's Type	Contact Comb.	Timing Range	Button Diam.	EAC
58 A 8125	113CX-1	SPDT	1 to 180 sec.	½"	12.9

ENGLER "S-O-S" HOUR METERS

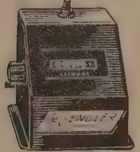


"Service-on-Signal" hour meters eliminate the need for costly maintenance time records: light up when maintenance is due. After resetting, light goes out for duration of maintenance time cycle. Can be programmed at machine or set up for remote control (in central maintenance office, etc.). Protected side-reset; easy-to-read figures. Metal case, standard 3-hold 2¹⁷⁄₃₂" dia. bolt circle. Shpg. wt., 12 oz.

NOTE: Meters are available factory preset in times from 10-90 hours (in 10-hour increments) from 100-1000 hours (in 100 hour increments). Specify time setting required.

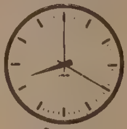
Stock No.	Mfr's Type	Range in Hours	Volts	EACH
58 A 8674 C	SOS10N-L-2	10-90	115 VAC	36.50
58 A 8675 C	SOS10N-L-2	100-1000	115 VAC	36.50
58 A 8676 C	SOSJ12N-2	10-90	12 VDC	39.50
58 A 8677 C	SOSJ12N-2	100-1000	12 VDC	39.50
58 A 8678 C	SOSJ24N-2	10-90	24 VDC	39.50
58 A 8679 C	SOSJ24N-2	100-1000	24 VDC	39.50

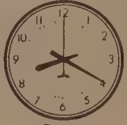
ENGLER ELECTRIC STOP CLOCK

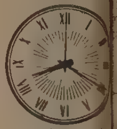


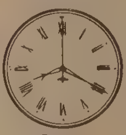
Timer (115 VAC) registers split-second elapsed time. Instantaneous start-stop feather-touch pushbutton. Immediately resettable. Metal cased instrument never needs servicing. Model CS60 reads in seconds and tenths. Model CS24 in minutes, hundredths.
58 A 8654. Model CS60. 1-4. . . . . .Ea. 40.00
5-9. . . . . .Ea. 33.50 10-24. . . . . .Ea. 30.50
58 A 8655. Model CS24. 1-4. . . . . . . .Ea. 40.00
5-9. . . . . Ea. 33.50 10-24. . . . . .Ea. 30.50

STANDARD SYNCHRONOUS DECORATOR CLOCKS


Senate


Tempo

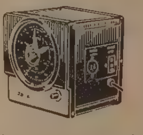

Apollo


Forum

Combine accurate time with attractive styli Driven by synchronous motor. Have concea reset stem. Mount flush on wall surfa Markers or numerals, hour and minute ha are black. Red sweep second hand. All ha 12" dial, round case. Senate has white d with black case. Tempo and Apollo have wh dial with satin aluminum case. Forum h satin bronze finish dial with lacquered bro case. For 115 VAC. Shpg. wt., 9 lbs.

Stock No.	Mfr's Type	Description	EACH
58 A 8843	Senate	12-inch Clock (No Numerals)	16.95
58 A 8844	Tempo	Above, Arabic Numerals	16.95
58 A 8846	Apollo	Above, Roman Numerals	16.95
58 A 8845	Forum	Above, Roman Numerals	20.95

INDUSTRIAL TIMER ELECTRIC STOP CLOCKS

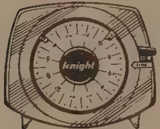


Measure time intervals for process and measurement, production control, time a motion studies—wherever precise short-timi measurements are required. Incorporate sy chronous motor, cone clutch for exceptio pull-in speed, 360° engagement, and automa wear compensation. Remote start-stop and res receptacles on side of case. Can be started wi pushbutton on cord or by a limit switch piece of equipment. Reset with front-panel res button or remotely through a series switch. Reset time, 010 se 5x5x4²⁵⁄₃₂". For 115 V, 60 Hz AC only. Shpg. wt., 5 lbs.

58 A 8441. Model SC-100. Measures 1/100 second to 60 second
1-5. . . . . . .Each 68.50 4-5. . . . . .Each 65.08 6-11. . . . .Each 61.

58 A 8445. Model SC-60. Measures 1 second to 60 minutes.
1-3. . . . . . .Each 68.50 4-5. . . . .Each 65.08 6-11. . . . .Each 61.

KNIGHT ALL-PURPOSE TIMER

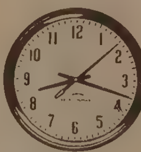


Handles Loads
Up to
1875 Watts

Designed specifically for Allied for use in home or shop. Controls a wide variety of devices—makes virtually any electrical appliance automatic. Handles up to 1875 watts (15 amps). Minimum ON time is 15 minutes; maximum ON time is 23¼ hours. Can be set to skip a day. Manual control with automatic reset. Dove Gray case with Midnight Blue dial. 5x4x2½". 6-foot cord, plug, instructions. 117 VAC. U.L. Listed.
58 A 8420. Shpg. wt., 2 lbs. 8.77

SETH-THOMAS

ACROTYNE COMMERCIAL WALL CLOCK

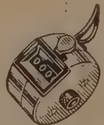


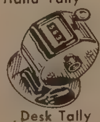
- Cordless Operation
- Durable Steel Case

Attractive cordless wall clock combines superb performance with truly economical operation. Operates about a year on one "D" cell. Features accurate, silent transistorized movement with precision electronic circuit tuning fork and magnetic coupling. Adjustable within ±2 seconds per day. Has white convex dial, black numerals and hands, red sweep second hand. Durable steel case. 14½" diameter. 2¾" depth. Big 12" dial. Less battery.
58 A 8243. No. 612 Bronze. 4½ lbs. . .32.50
58 A 8244. No. 613 Chrome. 4½ lbs. . .35.00

ITT GENERAL CONTROLS

HAND AND DESK TALLY COUNTERS

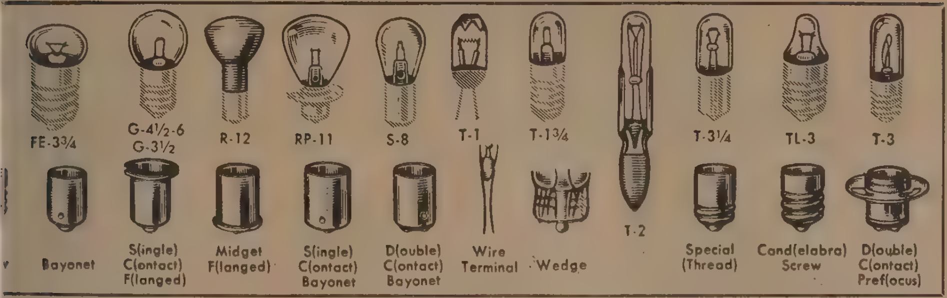

Hand Tally


Desk Tally

For blood counts, tra control surveys, engineeri surveys, factory or meeti attendance checks, inve tories, any general-purp counting applications. Ha Tally is 4-digit, pushbutto knob reset counter. 1 dia. Fits comfortably palm of hand. Chron plated to resist perspirati Desk Tally has mounti base.

Stock No.	Mfr's Type	Desc.	E
58 A 8887	CM4CS454	Hand Tally	3.
58 A 8888	CM4CS454D	Desk Tally	4.

Miniature and Subminiature Lamps



WILL SUPPLY LAMPS BY G.E. OR CHICAGO-MINIATURE, WHICHEVER ARE IN STOCK

riety of miniature and subminiature incandescent lamps applications as aircraft, annunciators, appliances, auto- bicycles, coin machines, flashlights, marine, medical, indi- signs and house numbers, radio and TV, telephone, toys and novelties. Offer extra-long life, reliability, low cost, high light output for amount of current consumed, low operating cost. For illustrations of bulb and base styles referred to in table, and explanation of abbreviations, refer to Figure above.

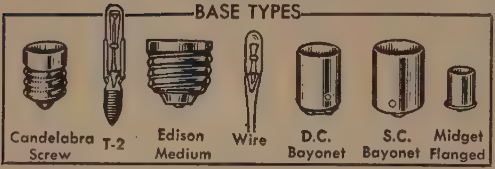
LAMPS WITHOUT "EACH" PRICE ARE AVAILABLE ONLY IN PACKAGES OF 10

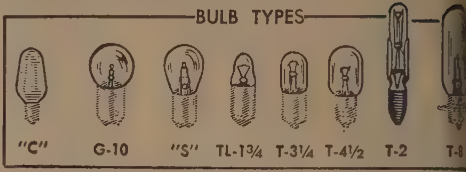
	Mfr's Type	Volts	Amps	Base	Bulb Style	EACH	Pkg. of 10
00	PR-2	2.4	.50	S.C.F.	B-3½	......	1.30
01	PR-3	3.6	.50	S.C.F	B-3½	......	1.30
02	PR-4	2.3	.27	S.C.F.	B-3½	......	1.30
03	PR-6	2.47	.30	S.C.F.	B-3½	......	1.30
05	PR-12	5.95	.50	S.C.F.	B-3½	......	1.30
06	PR-13	4.75	.50	S.C.F.	B-3½	......	1.30
67	6	6.4	3.0	D.C. Bayonet	S-8	.40	3.60
07	12	6.3	.15	Min. 2-pin	G-3½	......	1.70
08	13	3.7	.30	Screw	G-3½	......	1.10
09	14	2.5	.30	Screw	G-3½	......	1.10
10	24E	24	.035	Tel. Slide	T-2	.49	4.40
69	24X	24	.035	Tel. Slide	T-2	.49	4.40
12	39	6.3	.36	Bayonet	T-3¼	......	2.01
13	40	6.8	.15	Screw	T-3¼	......	.90
14	41	2.5	.50	Screw	T-3¼	......	1.70
15	43	2.5	.50	Bayonet	T-3¼	......	1.70
66	44	6.3	.25	Bayonet	T-3¼	......	.90
16	45	3.2	.35	Bayonet	T-3¼	......	1.40
17	46	6.3	.25	Screw	T-3¼	......	1.00
18	47	6.3	.15	Bayonet	T-3¼	......	.90
19	48	2.0	.06	Screw	T-3¼	......	1.70
20	48C	48	.035	Tel. Slide	T-2	.53	4.80
21	49	2.0	.06	Bayonet	T-3¼	......	1.40
22	50	7.5	1 c.p.	Screw	G-3½	......	1.00
23	51	7.5	1 c.p.	Bayonet	G-3½	......	.50
70	52	14.4	.10	Screw	G-3½	......	2.20
24	53	14.4	.12	Bayonet	G-3½	......	.90
25	55	7.0	2 c.p.	Bayonet	G-4½	......	.90
32	55C	55	.050	Tel. Slide	T-2	.53	4.80
26	57	14	2 c.p	Bayonet	G 4½	......	.90
27	63	6-8	3 c.p.	S.C. Bayonet	G-6	......	1.50
28	67	13.5	4 c.p.	S.C Bayonet	G-6	......	1.10
29	67K	13.5	4 c.p.	Cand. Screw	G-6	.39	3.50
30	81	6-8	6 c.p.	S.C. Bayonet	G-6	......	1.60
31	82	6-8	6 c.p.	D.C. Bayonet	G-6	......	1.60
07	93	12.8	1.04	S.C. Bayonet	S-8	......	2.00
32	112	1.2	.22	Screw	TL-3	......	1.10
37	137	6.3	.25	Min. Bay.	G-3½	......	1.40
38	157	5.8	1.1	Screw	G-6	.70	6.32
34	158	12	.24	Wedge	T-3¼	......	1.20
35	159	6.3	.15	Wedge	T-3¼	......	1.70
36	222	2.2	.25	Screw	TL-3	......	1.10
37	223	2.2	.25	Screw	FE-3¾	......	1.60
38	224	2.15	.22	Special	TL-2¾	......	1.40
39	233	2.3	.27	Screw	G 3½	......	1.60
39	240	6.3	.36	Bayonet	T-3¼	......	1.80
40	248	2.5	.80	Screw	G-5½	......	2.20
73	259	6.3	.25	Wedge	T-3¼	......	1.30
40	307	28	.67	S.C. Bayonet	S-8	.58	5.20
41	313	28.	.17	Bayonet	T-3¼	......	2.00
41	324	3	.19	Wire Term.	T-1¼	.46	4.10
42	327	28	.04	Mid. Flanged	T-1¾	.48	4.30
43	328	6	.20	Mid. Flanged	T-1¾	.38	3.40
74	330	14	.08	Mid. Flanged	T-1¾	.63	5.70
45	331	1.35	.06	Mid. Flanged	T-1¾	.71	6.40
46	334	28.0	.04	Mid. Flanged	T-1¾	.59	5.30
42	337	6	.20	S.C. Mid. F.	T-1¾	1.26	11.40
17	338	2.7	.06	Mid. Flanged	T-1¾	.64	5.80
75	344	10	.014	Mid. Flanged	T-1¾	1.02	9.20
76	345	6	.04	Mid. Flanged	T-1¾	1.12	10.10

Stock No.	Mfr's Type	Volts	Amps	Base	Bulb Style	EACH	Pkg. of 10
60 A 6743	346	18	.04	S.C. Mid. F.	T-1¾	.92	8.30
60 A 7377	363	14	.20	Bayonet	G-3½	......	1.50
60 A 8900	367X	10	.04	S.C. Mid. F.	T-1¾	1.75	10.60
60 A 8901	368	25	.20	S.C. Mid. F.	T-1¾	.53	4.80
60 A 6744	370	18	.04	S.C. Midget	T-1¾	1.09	9.90
60 A 6748	375	3	.015	S.C. Mid. F.	T-1¾	1.81	16.40
60 A 7400	380	6.3	.04	Mid. Flanged	T-1¾	1.54	14.00
60 A 7401	381	6.3	.20	Mid. Flanged	T-1¾	.84	7.60
60 A 7402	382	14	.08	Mid. Flanged	T-1¾	.96	8.70
60 A 6745	386	14	.08	Mid. Grooved	T-1¾	1.11	10.00
60 A 6746	387	28	.04	Mid. Flanged	T-1¾	.61	5.50
60 A 6747	388	28	.04	Mid. Grooved	T-1¾	1.12	10.10
60 A 7378	405	6.5	.50	Screw	G-4½	......	1.77
60 A 7379	406	2.6	.30	Screw	G-4½	......	1.41
60 A 7380	407	4.9	.30	Screw	G-4½	......	1.60
60 A 7344	425	5	.50	Screw	G-4½	......	1.46
60 A 7346	432	18.0	.25	Screw	G-4½	......	1.90
60 A 7347	433	18	.25	Bayonet	G-4½	......	1.90
60 A 7383	509K	24	.18	Cand. Screw	G-6	......	2.70
60 A 7393	680	5	.060	Wire Term.	T-1	2.17	19.70
60 A 7394	682	5	.060	Sub-Mid. F.	T-1	2.75	25.00
60 A 7395	683	5	.060	Wire. Term.	T-1	2.17	19.70
60 A 7396	685	5	.060	Sub-Mid. F.	T-1	2.75	25.00
60 A 7397	715	5	.115	Wire Term.	T-1	2.17	19.70
60 A 7403	755	6.3	.15	Min. Bay.	T-3¼	......	2.10
60 A 7404	756	14	.08	Min. Bay.	T-3¼	.32	2.90
60 A 7405	757	28	.08	Bayonet	T-3¼	.35	3.10
60 A 6600	1133	6.2	3.91	S.C. Bayonet	RP-N	.39	3.50
60 A 6749	1252	24	.23	D.C. Bayonet	G-6	.40	3.60
60 A 7384	1383	12	20w	S.C. Bayonet	R-12	2.12	19.20
60 A 7349	1445	18	.15	Bayonet	G-3½	......	1.20
60 A 7350	1446	12	.20	Screw	G-3½	......	1.90
60 A 7351	1447	1.80	.15	Screw	G-3½	......	1.40
60 A 7353	1458	20	.25	Bayonet	G-5	......	2.20
60 A 7385	1474	14	.17	Screw	T-3	.35	3.10
60 A 7354	1477	24	.17	Screw	T-3	.48	4.30
60 A 7355	1487	12-16	.20	Screw	T-3¼	......	1.70
60 A 7356	1488	14	.15	Bayonet	T-3¼	......	1.80
60 A 7533	1490	3.2	0.16	Bayonet	T-3¼	......	1.40
60 A 7357	1493	6.5	2.75	D.C. Bayonet	S-8	.93	8.40
60 A 7386	1630	6.5	2.75	D.C. Pref.	S-8	1.30	11.20
60 A 7359	1768	6	.20	Midget Screw	T-1¾	.66	6.00
60 A 7388	1769	2.5	.20	Midget Screw	T-1¾	.81	7.30
60 A 7360	1813	14.4	.10	Min. Bayonet	T-3¼	......	1.80
60 A 7361	1815	12-16	.20	Min. Bayonet	T-3¼	......	1.60
60 A 7389	1816	13	.33	Min. Bayonet	T-3¼	......	1.50
60 A 7362	1819	28	.04	Min. Bayonet	T-3¼	......	2.40
60 A 7363	1820	28	.10	Min. Bayonet	T-3¼	......	2.10
60 A 7390	1822	36	.10	Min. Bayonet	T-3¼	.48	4.30
60 A 7391	1828	37.5	.05	Min. Bayonet	T-3¼	.51	4.60
60 A 7364	1829	28	.07	Min. Bayonet	T-3¼	......	2.30
60 A 7392	1835	55	.05	Min. Bayonet	T-3¼	.57	5.10
60 A 7365	1847	6.3	.15	Min. Bayonet	T-3¼	......	1.20
60 A 7596	1869	10	.014	Wire Term.	T-1¾	.84	7.60
60 A 7542	1891	12.0	0.24	Min. Bayonet	T-3¼	......	1.10
60 A 7543	1892	14.0	0.12	Min. Bayonet	T-3¼	......	1.70
60 A 7399	2128	3	.0125	Wire Term.	T-1	2.40	21.80
60 A 7406	2180	6.3	.04	Wire Term.	T-1¾	.80	7.20
60 A 7407	2181	6.3	.20	Wire Term.	T-1¾	.44	4.00
60 A 7408	2182	14	0.8	Wire Term.	T-1¾	.48	4.30

Lamps, Sockets and Reducers

GENERAL ELECTRIC MINIATURE INDICATOR, CONTROL, APPLIANCE LAMPS



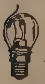


MINIATURE NEON-GLOW INDICATOR LAMPS

Withstand vibration, shock. For 150-600 V except ‡210-600 V. §DC only. Screw types have series resistor in base for 105-125 V, others require external resistor. In table, Sk. means skirted; D.C., double contact; S.C., single contact; Mid. Flange, midget flanged; Bay., bayonet; Cand., candelabra; others self-explanatory. *AC starting V; DC starting V 40% more. †High brightness. Av. wt., 2 oz. ea.

Stock No.	Mfr's Type	Watts	*AC V	Bulb Style	Base	EA.
60 A 8516	A1B	1/25	65	T-2	Wire Term.	.13
60 A 8517	†A1C	1/10	95	T-2	Wire Term.	.13
60 A 8518	A1A (NE-2)	1/17	65	T-2	Wire Term.	.10
60 A 8519	C7A (NE-2D)	1/15	65	T-2	S.C. Mid. Flange	.78
60 A 8520	A9A (NE-2E)	1/15	65	T-2	Wire Term.	.10
60 A 8521	†C2A (NE-2H)	¼	.	T-2	Wire Term.	.11
60 A 8522	†C9A (NE-2J)	¼	105	T-2	S.C. Mid. Flange	.78
60 A 8523	B4A (NE-7)	¼	55	T-4½	Wire Term.	.69
60 A 8524	7AA (NE-16)	¼	§67	T-4½	D.C. Bay. Cand.	.63
60 A 8525	B5A (NE-17)	¼	55	T-4½	D.C. Bay. Cand.	.86
60 A 8526	B6A (NE-21)	¼	55	T-4½	S.C. Bay. Cand.	.90
60 A 8527	J5A (NE-30)	1	65	S-11	Edison	1.14
60 A 8528	L5A (NE-32)	1	65	G-10	D.C. Bay. Cand.	1.14
60 A 8529	R2A (NE-34)	2	65	S-14	Edison	1.76
60 A 8530	R6A (NE-40)	3	60	S-14	Edison	2.56
60 A 8531	R9A (NE-42)	3	60	S-14	Sk. D.C. Bay. Cand.	2.52
60 A 8532	B7A (NE-45)	¼	65	T-4½	Cand. Screw	.81
60 A 8533	B9A (NE-48)	¼	65	T-4½	D.C. Bay. Cand.	.67
60 A 8534	B1A (NE-51)	1/25	65	T-3¼	S.C. Bay. Min.	.20
60 A 8535	†B2A (NE-51H)	1/7	....	T-3¼	S.C. Bay. Min.	.22
60 A 8536	‡J9A (NE-56)	1	60	S-11	Edison	1.19
60 A 8537	F3A (NE-57)	¼	65	T-4½	Cand. Screw	.94
60 A 8538	‡F4A (NE-58)	½	65	T-4½	Cand. Screw	.90
60 A 8929	F5A (NE-66)	1¼	65	T-4½	Cand. Screw	1.25
60 A 8930	K1A (NE-84)	¼	95	T-2	Special Tel. Slide	.64

TUNGAR BULBS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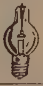

B

Argon and argon-mercury filled tungar bulbs for rectification of AC to DC in battery chargers. etc. *For use in movie projectors, †Amps. Av. shpg. wt., 1¼ lbs.

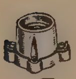
Stock No.	Mfr's Type	Fig.	†	EACH	Stock No.	Mfr's Type	Fig.	†	EACH
60 A 7592	12X825	....	2	7.90	60 A 7595	189048	B	6	8.05
60 A 7593	206501	A	2	7.95	60 A 7597	189049	B	6	8.05
60 A 7594	20X672	. . .	5	10.85	60 A 7598	*217283	B	15	14.95

HIGH-OUTPUT LENS-END MINIATURE LAMPS

Focused beam, ideal for activating photoconductors in card or tape operations. 0.35 amp at 2.5 V, AC-DC. Midget grooved base. Overall diameter, .250″. 1¹⁄₁₆″ long. Wt., 3 oz.

Stock No.	Type	Style	Life (hrs.)	EACH
60 A 7957	253	GTL-1¾	10,000	2.66
60 A 7958	253X	GTL-1¾	10,000	3.52
60 A 7959	261	GTL-1¾	5,000	7.67

SOCKETS, REDUCERS FOR NEON, ARGON, PILOT LAMPS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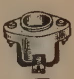
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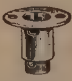
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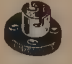
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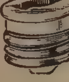
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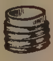

H

Reducer fits into socket to convert to more commonly used types of bulb bases. *Indicates socket with built-in hard rubber insert in metal shell. Av. shpg. wt., 3 oz.

Stock No.	Fig.	Description	EACH
60 A 7661	C	Edison socket	.24
60 A 7662	C	Miniature screw socket	.18
60 A 7663	D	Candelabra screw socket	.61
60 A 7664	C	Candelabra screw socket	.18
60 A 7665	E*	D.C. bay, candelabra socket	.40
60 A 7666	F	D.C. bay, candelabra socket	.94
60 A 7667	F	S.C. bay, candelabra socket	.90
60 A 7668	G	Edison-to-Cand. reducer	.25
60 A 7669	H	Candelabra-to-Min. reducer	.18
60 A 7670	H	Intermediate-to-Cand. reducer	.11

MINIATURE NEON-GLOW CIRCUIT CONTROL LAMPS

Rugged miniature T-2 bulbs with wire-terminal bases. A m radioactive additive reduces breakdown voltage in darkness. Tin 1″ leads permit easy soldering. Av. shpg. wt., 2 oz. ea.

Stock No.	Mfr's Type	DC Start Volts	Design DC mA	EAC
60 A 7950	5AB (NE-23)	60 90	.3	.1
60 A 7951	5AG-A (NE-76)	68-76	.4	.5
60 A 7953	5AH (NE-83)	60-100	10.0	.2
60 A 7954	5AJ (NE-86)	55-90	1.5	.1
60 A 7955	4AB (NE-96)	120-150	.5	.2
60 A 7956	4AC (NE-97)	110-140	.5	.2

ARGON GLOW LAMPS

Long-life lamps emit pale blue-violet light, near-ultraviolet rad tion. Clear glass. Type AR-3 has average life of 1000 hours. A average life of 3000 hours. For 110-120 V. Av. shpg. wt., 2 o

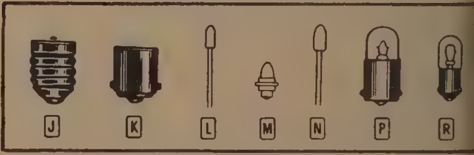
Stock No.	Mfr's Type	Watts	Bulb	Base	EAC
60 A 8541	AR-3	¼	T-4½	Candelabra Screw	.85
60 A 8542	AR-1	2	S-14	Edison Medium	1.90

SIGN AND APPLIANCE LAMPS

Rated 1500 hours, average use. Clear glass envelopes, except *wh glass. †Night light. All are miniature, except ‡large. For 120 vo Av. shpg. wt., 2 oz. each.

Stock No.	Watts	Bulb	Base	EACH
60 A 7600	6	S-6	Candelabra	.21
60 A 7601	7	†C-7	Candelabra	.21
60 A 7602	7	*C-7	Candelabra	.25
60 A 7603	7½	‡S-11	Medium	.34
60 A 7604	10	C-7	D.C. Bayonet Cand.	.29
60 A 7605	15	T-7	D.C. Bayonet Cand.	.49
60 A 7606	25	T-8	D.C. Bayonet Cand.	.49

CHICAGO-MINIATURE



STANDARD VOLTAGE LAMPS

Stock No.	Mfr's Type	Fig.	Volts	Watts	Bulb Style	EACH	Pk of
60 A 7475	3S6/5	J	120	3	S-6	.41	3.7
60 A 7477	6S6	J	115	6	S-6	.25	2.2
60 A 7479	6S6	J	145	6	S-6	.49	4.4
60 A 7480	6S6/DC	K	120	6	S-6	.36	3.2
60 A 7481	6T4½/1	J	115 125	6	T-4½	.75	6.8
60 A 7482	7C7	J	115-125	7	C-7	.25	2.2
60 A 7483	10C7	J	115-125	10	C-7	.30	2.7
60 A 7484	10C7DC	K	115-125	10	C-7	.32	2.9
60 A 7485	10S6/10	J	230	10	S-6	.56	5.1

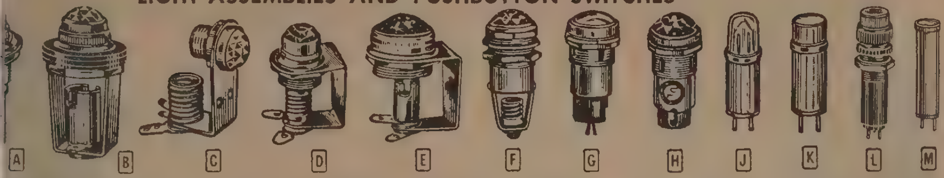
LONG LIFE LAMPS

Designed for exceptionally long life, reliability and low replaceme rate. Resistant to deteriorating effects of vibration, shock. Id for critical applications where replacement is difficult or impossib M. F., midget flanged. W. T., wire terminal. S. F., submid flanged. M, Bay., miniature bayonet. Av. wt., 6 oz.

Stock No.	Mfr's Type	Fig.	Volts	Amps	Base	Bulb Style	EA.	Pk of
60 A 9406	327LSV	P	28.0	.06	M.F.	T-1¾	1.16	10.
60 A 9411	713	N	5.0	.075	W.T.	T-1	2.17	19.
60 A 9412	714	M	5.0	.075	S.F.	T-1	2.75	25.
60 A 9415	7153	L	5.0	.115	W.T.	T ¾	2.28	20.
60 A 9417	CM8-801	R	5.0	.06	M., Bay	T-3¼	2.37	21.
60 A 9418	CM8-802	R	5.0	.06	M., Bay.	T 3¼	2.37	21.
60 A 9419	CM8-803	R	5.0	.104	M., Bay.	T-3¼	2.37	21.
60 A 9421	1866	R	6.3	.25	M., Bay.	T 3¼	.15	1.3

lco Pilot Light Assemblies, Switches, Indicators

LIGHT ASSEMBLIES AND PUSHBUTTON SWITCHES



ENCLOSED SIGNAL ASSEMBLIES

s 81-9110. Convex lens; smooth face, d back. ½" white, nickel-plated brass Use bayonet lamp, replaceable from 4" long. 1⅙" mtg. hole. Panels up to k. *Translucent, unfrosted. Solder s. Less lamp. Shpg. wt., 2 oz.

No.	Type	Color	EACH
780	-0111-102	Red	.82
781	-0112-102	Green	.82
782	-0113-102	Amber	.82
786	-0114-102	Blue	.82
785	-0135-102*	White	.82

NCH OPEN MIN. BAYONET TYPES

s 502-8140. Have ½" lens and 1⅙" ting hole. Faceted and unfrosted. Less pg. wt., 2 oz.

No.	Type	Color	EACH
889	-2131-100	Red	.63
890	-2132-100	Green	.63
891	-2133-100	Amber	.63

-3¼ LAMPS FOR ABOVE

ontact miniature bayonet lamps for 1-9110 and 502-8140. Shpg. wt., 2 oz.

o.	V	EA.	Stk. No.	V	EA.
66	6-8	.15	60 A 7341	28	.33
16	3.2	.22	60 A 7361	12-16	.20

SED NEON LIGHT ASSEMBLIES

5-9108* and 95-9163†. With built-in stor for NE-51, 110-125 V circuit; or NE-51H high-brightness neon glow 10-125 VAC or DC. 2⅙" long. 1⅙" e. *Solder terms. †Screw terms. ■U.L. ess lamp. 2 oz.

No.	FOR	Type	Color	EA.
38	*NE-51	-0931-142	Red	.87
39	*NE-51	-0933-142	Amber	.87
40	*NE-51	-0935-142	White	.87
341	*NE-51	-0937-142	Clear	.87
97	†NE-51H	-0931-112	Red	.87
98	†NE-51H	-0933-112	Amber	.87
99	†NE-51H	-0935-112	White	.87
732	†NE-51H	-0937-112	Clear	.87

34. NE-51B1A Lamp. 2 oz..... .20
35. NE-51HB2A Lamp. 2 oz... .22

ENCLOSED NEON LIGHT ASSEMBLIES

Series 95-9110. Same as 95-9163, below left, but less resistor. For miniature bayonet lamps. Solder terminals. 2 oz.

Stock No.	Type	Color	EACH
60 A 7846	-0931-102	Red	.73
60 A 7847	-0932-102	Green	.73
60 A 7848	-0933-102	Amber	.73
60 A 7850	-0935-102	White	.73

OPEN TYPES—FACETED JEWEL LENSES

C **Series 502-1015, 502-1024.** ½" lens. Min. screw for T-3¼ bulb; bayonet (not illus.), T-3¼ bulb. 7⁄16" clearance hole. 2 oz.

Color	502-1015 Min. Screw	502-1024 Bayonet
Red	60 A 7938	60 A 7940
Green	60 A 7941	60 A 7943
Amber	60 A 7944	60 A 7946

Any Color......................**Each .34**

D **Series 502.** ½" lens. For T-3¼ bulb. 1⅙" clearance hole. *Not illus. 2 oz.

Color	Min. Screw -8137	Bayonet* -8136	EACH
Red	60 A 7966	60 A 7967	.50
Green	60 A 7968	60 A 7969	.50
Amber	60 A 7970	60 A 7971	.50
Blue	....	60 A 7990	.50
White	....	60 A 7992	.50

E **Series 502.** 1" jewel. 3241 requires T-3¼ bulb; -3214, S6 bulb. 1" clearance hole. *Not illustrated. Shpg. wt., 2 oz.

Color	-3214 Cand.*	-3241 Bay.
Red	60 A 7975	60 A 7947
Green	60 A 7976	60 A 7948
Amber	60 A 7977	60 A 7949

Any Color......................**Each .88**

Lamps for Above. *Miniature Screw. †Candelabra. ‡Bayonet. Wt., 2 oz.

Stock No.	V	EA.	Stock No.	V	EA.
60 A 7317	*6-8	.15	60 A 7383	†24	.32
60 A 7355	*12-16	.26	60 A 7366	‡6-8	.15
60 A 7329	†13.5	.52	60 A 7361	‡12-16	.20

115-V ONE-INCH MOUNT-ASSEMBLIES

F **Series 502-3228.** Open type. Faceted jewel. Chromed solid-brass holder. Candelabra screw socket. Less lamp, below. 2 oz.

Stock No.	Type	Color	Stock No.	Type	Color
60 A 7860	-0431	Red	60 A 7862	-0433	Amber
60 A 7861	-0432	Green	....	......	..

Any Color......................**Each .98**

G **Series 31-2901.** Enclosed. Frosted back. Brass; chromed cap. 6" leads. *Translucent. Less lamp, below. 3 oz.

Stock No.	Type	Color	EACH
60 A 7934	0111-302	Red	1.74
60 A 7935	0112-302	Green	1.74
60 A 7936	0113-302	Amber	1.74
60 A 7937	0117-302	Clear	1.74
60 A 7866	0135-302	White*	1.74

H **Series 31-3101.** Enclosed. Faceted. Black phenolic; brass. Chromed. Cand. base. ■U.L. Recog. Less lamp, below. 2 oz.

Stock No.	Type	Color	EACH
60 A 7928	-0431-302	Red	1.46
60 A 7929	-0432-302	Green	1.46
60 A 7930	-0433-302	Amber	1.46
60 A 7933	-0434-302	Blue	1.46
60 A 7932	-0435-302	White	1.46
60 A 7931	-0437-302	Clear	1.46

60 A 7600. 6S6-125V Lamp. 1 oz. **Each .21**

6-V INCANDESCENT LAMP CARTRIDGES

Series 507-3906. Unbased T-1¾ lamps in aluminum sleeves, capped with plastic lenses. Operating life: 1000 hours. Stainless steel pins, nylon insul. 6 volts, 300 mA.

J SHORT CYLINDER

Stock No.	Type	Color
60 A 8429	507-3906-1471-600	Red
60 A 8430	507-3906-1472-600	Green
60 A 8431	507-3906-1473-600	Amber
60 A 8432	507-3906-1474-600	Blue
60 A 8433	507-3906-1475-600	White

K STOVEPIPE

Stock No.	Type	Color
60 A 8423	507-3906-0971-600	Red
60 A 8424	507-3906-0972-600	Green

Any Color......................**Each 1.15**

14-V LAMP CARTRIDGES

K **Series 507-3914.** For 14-volt, 80-milliampere operation. Short-cylinder type lamp cartridge. Mounts in ⅜" clearance hole. Operating life: 50,000 hours.

Stock No.	Type	Color
60 A 8464	507-3914-1471-600	Red
60 A 8465	507-3914-1472-600	Green
60 A 8466	507-3914-1473 600	Amber
60 A 8467	507-3914-1474-600	Blue
60 A 8468	507-3914-1475-600	White

Any Color......................**Each 1.28**

115-125-V ASSEMBLY

L **Series 250-8758.** Indicator light for 115-120 volts, 60 Hz. With refractive inner surfaces. Uses cartridge below. Rear mount holder for ⅜" clearance.

Stock No.	Type	Color
60 A 6630	250-8758-3331-504	Red
60 A 6631	250-8758-3332-504	Green
60 A 6632	250-8758-3333-504	Amber
60 A 6633	250-8758 3335-504	White

Any Color......................**Each 1.68**

M **Lamp Cartridge 507-5824-0747-600.** Order for the 250-8758 Series above and have correct light and cartridge for immediate use.
60 A 6634......................**Each 1.38**

CAPS FOR ASSEMBLIES, SWITCHES AND INDICATORS

0512
514-1012
81
31

SERIES 0512 AND 1012
NEL-MOUNTING LENS CAPS

nounting lens caps are ⅜" long. Re- 1⁄16" behind panel. Mounting holes: 0512, 9⁄32"-32 thread; Series 1012, thread. Shpg. wt., 2 oz.

	Mfr's Type 514-	Dia.	Color	EACH	
				1-9	10-24
18	1012-2131-102	½"	Red	.18	.16
19	1012-2132-102	½"	Green	.18	.16
20	1012-2133-102	½"	Amber	.18	.16
23	0512-2131-102	11⁄32"	Red	.17	.15
24	0512-2132-102	11⁄32"	Green	.17	.15
25	0512-2133-102	11⁄32"	Amber	.17	.15
26	0512-2134-102	11⁄32"	Blue	.17	.15
27	0512-2135-102	11⁄32"	White	.17	.15

SERIES 31 AND 81 LENS CAPS

Series 31. For 502-3228, 31-2901, and 31-3101 pilot light assemblies. Polished chrome. *Convex lens (frosted on back). †Faceted. 2 oz.

Color	Stock No.	Mfr's Type*	Stock No.	Mfr's Type†
Red	60 A 7999	-0111-300	60 A 8006	-0431-300
Green	60 A 8000	-0112-300	60 A 8007	-0432-300
Amber	60 A 8001	-0113-300	60 A 8008	-0433-300
Clear	60 A 8005	-0117-300	60 A 8012	-0437-300

Any Color......................**Each .62**

Series 81. For 81-9110, 815190 and 502-8140 pilot light assemblies. White-nickel lens holders. Convex lens (frosted on back). 3 oz.

Stock No.	Mfr's Type	Color	EACH
60 A 8040	0111-100	Red	.28
60 A 8041	0112 100	Green	.28
60 A 8042	0113-100	Amber	.28
60 A 8044	0135-100	White	.28

2" LENS CAPS FOR PUSHBUTTON SWITCHES AND INDICATOR LIGHT

ROUND
SQUARE

rotatable types permit alignafter installation. Keyed square push on for permanent position- ive solid-color translucent face les. High-strength plastic lens. wt., 2 oz.

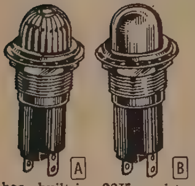
Color	Round Rotatable		Square Keyed		EA.
	Stk. No.	Type	Stk. No.	Type	
Red	60 A 8857	183 1471	60 A 8878	184 1871	.59
Green	60 A 8858	183-1472	60 A 8879	184-1872	.59
Amber	60 A 8859	183-1473	60 A 8880	184-1873	.59
Blue	60 A 8860	183-1474	60 A 8881	184-1874	.59
White	60 A 8861	183-1475	60 A 8882	184-1875	.59
Lt. Yel	60 A 8862	183-1476	....	......	.59
Ivory	60 A 8863	183-1478	....	......	.59

ognized under component program of Underwriter's Laboratories, Inc

Pilot and Indicator Lights; Lamp Sockets

DIALCO INDICATORS

NEON INDICATORS WITH BUILT-IN RESISTORS



A **Series 52-0408*, 52-0463†.** For T-3¼ neon lamp. Same as Series 95-9108, but with fluted stovepipe lens. Meets **MIL-L-3661.** Solder terminals. *Series 52-0408 has built-in 56K resistor for B1A lamp; add suffix -241. †Series 52-0463 has built-in 22K resistor for B2A high-brightness lamp; add suffix -211. Av. shpg. wt., 2 oz.

Lens Color	B1A* Stock No.	B2A† Stock No.	Mfr's Type *†	EACH
Red	60 A 7806	60 A 7810	-0991-	1.26
Amber	60 A 7807	60 A 7811	-0993-	1.26
White	60 A 7808	60 A 7812	-0995-	1.26
Clear	60 A 7809	60 A 7813	-0997-	1.26

Series 52-1308*, 52-1363†. As above, but with screw terminals.

Red	60 A 7814	60 A 7818	-0991-	1.34
Amber	60 A 7815	60 A 7819	-0993-	1.34
White	60 A 7816	60 A 7820	-0995-	1.34
Clear	60 A 7817	60 A 7821	-0997-	1.34

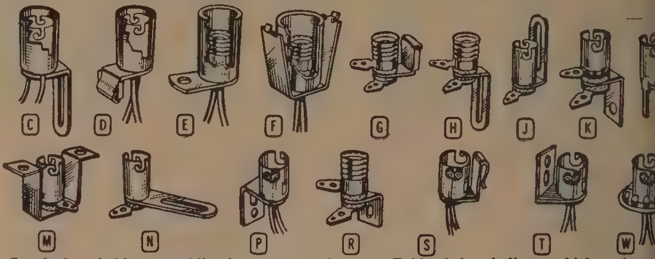
B **Series 95-0408*, 95-0463†.** For T-3¼ neon lamp. Meet MIL specs. Smooth stovepipe lens. 110-125V, AC-DC. Black nickel finish. 2$\frac{1}{16}$" long. ■U.L. Recog., C.S.A. Listed. Solder terminals. *Prefix 95-0408 for B1A; add Suffix -241. †Prefix 95-0463 for B2A; add Suffix -211. Av. shpg. wt., 2 oz.

Red	60 A 7822	60 A 7826	-0931-	1.26
Amber	60 A 7823	60 A 7827	-0933-	1.26
White	60 A 7824	60 A 7828	-0935-	1.26
Clear	60 A 7825	60 A 7829	-0937-	1.26

B **Series 95-9108*, 95-9163†.** Same as Series 95-0408 above, but with plastic head and phenolic body. ■U.L. Recognized. Solder terminals. *Use Prefix 95-9108 for B1A lamp; add Suffix -142. †Prefix 95-9163 for B2A amp; add Suffix -112. For 110-125 V, AC-DC. Av. shpg. wt., 2 oz.

Red	60 A 7838	60 A 7697	-0931-	.87
Amber	60 A 7839	60 A 7698	-0933-	.87
White	60 A 7840	60 A 7699	-0935-	.87
Clear	60 A 7841	60 A 7732	-0937-	.87

LEECRAFT LAMPHOLDER ASSEMBLIES



Sturdy lampholder assemblies for every requirement. Tables below indicate which sockets brackets combine to make up each lampholder. Av. shpg. wt., 5 oz.

Series 2-00. Miniature bayonet sockets with insulating sleeves. .025 to .032" steel brackets; cadmium-plated. Built-in #22 wire leads.

Stock No.	Type	Socket	Bracket	EACH
60 A 8054	2-01	C	S	.46
60 A 8055	2-04	D	D	.46
60 A 8056	2-06	C	C	.46
60 A 8057	2-13	C	N	.46
60 A 8058	2-15	C	F	.46

Series 4-00. Candelabra screw sockets in molded bakelite. #18 black and white wire, 6" long with ends stripped ½". For both incandescent and neon glow lamps.

60 A 8066	4-01	F	S	.50
60 A 8068	4-05	F	R	.50
60 A 8069	4-06	F	C	.50
60 A 8070	4-08	F	R	.50

Series 5-00. Miniature screw sockets. Tinned solder terminals. For low-voltage incandescent lamps. Cadmium-plated steel brackets.

60 A 8072	5-01	G	S	.35
60 A 8073	5-04	G	D	.35
60 A 8074	5-05	G	J	.35
60 A 8075	5-06	G	H	.35
60 A 8076	5-07	G	NONE	.35
60 A 8077	5-08	G	R	.35
60 A 8078	5-13	G	N	.35

Series 6-00. Candelabra sockets. Tinned solder terminals. .025 to .032" steel brackets; cadmium-plated for corrosion resistance. For G6, S6 incandescent lamps.

60 A 8080	6-01	H	S	.39
60 A 8081	6-04	H	D	.39
60 A 8082	6-05	H	J	.39
60 A 8083	6-06	H	H	.39
60 A 8084	6-07	H	NONE	.39
60 A 8085	6-08	H	R	.39
60 A 8086	6-11	H	M	.39
60 A 8087	6-13	H	N	.39

Series 7-00. Miniature bayonet sockets v solder terminals for low-voltage incandes lamps as T-3½, G-3½, and G-4½. *Desig for printed circuits.

Stock No.	Type	Socket	Bracket	EA
60 A 8089	7-01	M	S	.4
60 A 8090	7-04	M	D	.4
60 A 8091	7-05	J	J	.4
60 A 8092	7-06	M	C	.4
60 A 8093	7-07	M	NONE	.4
60 A 8094	7-08	M	R	.4
60 A 8095	7-11	M	M	.4
60 A 8096	7-13	N	N	.4
60 A 8097	7-15	M	F	.4
60 A 8098	7-20	K	K	.4
60 A 8099	*7-35	L	L	.

Series 11-200. Single-contact candela bayonet socket with one wire lead. Comes v #18 wire and .035 to .042" thick steel brack cadmium-plated for high corrosion resista

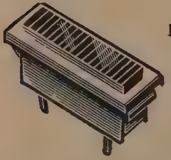
Stock No.	Type	Socket	Bracket	EA
60 A 8100	11-271	P	T	.4
60 A 8101	11-272	P	P	.4

Series 12-200. Double-contact candela bayonet sockets. Contacts are mounted i bakelite disk and separated by small c Disk is spring-loaded to assure positive cont Can be used with incandescent and neon g lamps as NE-48, S6, and 10C7. *Type 12- has plug-in bracket. ■U.L. Recognized C.S.A. Listed.

Stock No.	Type	Socket	Bracket	EA
60 A 8102	12-201	S	S	.
60 A 8104	12-212	S	E	.
60 A 8105	*12-240	W	W	.
60 A 8106	12-271	T	T	.
60 A 8107	12-272	P	P	.

LEECRAFT NEON PILOT LIGHTS AND INDICATORS

NEON INDICATOR LIGHTS

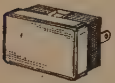


Rectangular neon indicator lights—excellent for new equipment design or for modernizing existing equipment. White nylon housing with chromed bezel. Have 6" insulated leads. Require 1.281x.395" mtg. hole. Built-in series resistor. Rated ⅓ watt at 125-250 volts. Size, 1⅜x$\frac{15}{32}$x$2\frac{1}{32}$". Shpg. wt., 5 oz.

SERIES 31—110-125 VOLTS

Stock No.	Type	Color	EACH
60 A 6018	31-2111	Red	.92
60 A 6019	31-2113	Amber	.92
60 A 6021	31-2115	White	.92

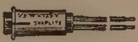
SNAP-IN NEON INDICATOR LIGHTS



Series 47. One-piece, high-heat plastic units snap easily and securely into 1$\frac{3}{16}$x⅝" panel opening with no additional hardware required. Suitable for up to ⅛" thick panels. Have long-life, high-brightness neon lamps with built-in current-limiting resistors. Tinned solder lug terminals. Type 47-3 rated ⅓-watt, 110-125 volts; Type 47H-3 rated ⅓-watt, 210-250 volts. ■U.L. Recog. Shpg. wt., 5 oz.

60 A 6623. Type 47-3. Red ...... Each 1.08
60 A 6624. Type 47-H-3. Red .... Each 1.08

SNAPLITE NEON PILOT LIGHTS



Snap into ½"-diameter holes in panels of any thickness without additional hardware. White nylon housing contains long-life neon lamp and built-in resistor for proper circuit voltage. ⅓ watt. Series 32 is for 110-125 volts; Series 35 is for 210-250 volts. Plastic lens caps for 110-200°C. Series 32 has up to 15,000-hour life; Series 35, up to 25,000 hours. ■U.L. Recog. 5 oz.

CYLINDRICAL-CAP TYPES

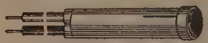
Stock No.	Mfr's Type	Color	EACH
60 A 7921	32-2111	Red	.86
60 A 7922	32-2113	Amber	.86
60 A 7923	32-2117	Clear	.86
60 A 8124	32-2115	White	.86
60 A 7925	35-2111	Red	.86
60 A 7926	35-2113	Amber	.86

DOME-CAP TYPES

60 A 7758	32-2211T	Red	.86
60 A 7783	32-2213T	Amber	.86
60 A 7882	32-2215T	Clear	.86
60 A 7911	32-2217T	White	.86

FLUSH-CAP TYPES

Stock No.	Mfr's Type	Color	EACH
60 A 7982	32-2311	Red	.86
60 A 7983	32-2313	Amber	.86
60 A 7984	32-2315	White	.86
60 A 7985	32-2317	Clear	.86
60 A 7986	32-2311T	Red	.86
60 A 8749	32-2313T	Amber	.86



"TINEON INDICATO

Extremely long-life, high-brightness neon dicator lights press-fit quickly and firmly 5/16"-diameter holes. Have durable nylon h ing and plastic lens. Lamp housing is 1½" l Complete with speed nut for maximum se ity, lamp and built-in resistor to suit the plied circuit voltage and ensure maxim lamp life. Rated 110-125 volts. Have #18 ga insulated wire leads, 6" long. ■U.L. Recogni C.S.A. Listed. Shpg. wt., 5 oz.

STANDARD BEZEL TYPES

Stock No.	Mfr's Type	Color	EA
60 A 8698	36N-2311	Red	.8
60 A 8699	36N-2313	Amber	.8
60 A 8700	36N-2315	White	.8
60 A 8701	36N-2317	Clear	.8

ALUMINUM-BEZEL HI-HAT-LENS TYPES

Stock No.	Mfr's Type	Color	EA
60 A 7000	36EN2111	Red	.9
60 A 7048	36EN2113	Amber	.9
60 A 7052	36EN2115	White	.9
60 A 7053	36EN2117	Clear	.9

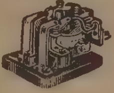
ALUMINUM-BEZEL FLUSH-LENS TYPES

Stock No.	Mfr's Type	Color	EA
60 A 7066	36EN2311	Red	.9
60 A 7068	36EN2313	Amber	.9
60 A 7069	36EN2315	White	.9
60 A 7498	36EN2317	Clear	.9

Potter & Brumfield Relays and Accessories

Dn these pages, you'll find the most popular contact arrangenents, ratings, terminations, enclosures, and coil voltages listed. Contact us for prices and other product information on any types not listed—you'll receive a prompt reply.

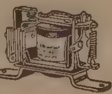
R HEAVY-DUTY POWER RELAYS



T normally open.
y screw terminals. All
. Recog. and AC types
C.S.A. Listed; except
AL5, neither. All have
ıp silver contacts ex-
PR11AL5 with 20-amp
cts. *Equipped with
ary DPDT 5-amp con-
. Sizes: all are 2½" wide; PR3, PR5, $2\frac{7}{32}$x
PR7, 2½x$2\frac{7}{16}$"; PR11, 2½x3⅜". Dust
s, below right. Av. shpg. wt., 12 oz.

k No.	Type	Volts	Action	EACH
5846	PR3AY	6 AC	SPST	4.55
6751	PR3AY	12 AC	SPST	4.55
5961	PR3AY	24 AC	SPST	4.55
5600	PR3AY	120 AC	SPST	4.55
5652	PR3AY	240 AC	SPST	5.00
6509	PR3DY	12 DC	SPST	4.55
6101	PR3DY	24 DC	SPST	4.55
5968	PR3DY	110 DC	SPST	5.25
5847	PR5AY	6 AC	SPDT	4.80
5878	PR5AY	12 AC	SPDT	4.80
5962	PR5AY	24 AC	SPDT	4.80
5602	PR5AY	120 AC	SPDT	4.80
5966	PR5AY	240 AC	SPDT	5.25
6750	PR5DY	6 DC	SPDT	4.80
6510	PR5DY	12 DC	SPDT	4.80
6754	PR5DY	24 DC	SPDT	4.80
5969	PR5DY	110 DC	SPDT	5.45
5848	PR7AY	6 AC	DPST	5.40
5879	PR7AY	12 AC	DPST	5.40
5963	PR7AY	24 AC	DPST	5.40
5603	PR7AY	120 AC	DPST	5.40
5654	PR7AY	240 AC	DPST	5.90
6102	PR7DY	6 DC	DPST	5.40
6511	PR7DY	12 DC	DPST	5.40
6513	PR7DY	24 DC	DPST	5.40
5970	PR7DY	110 DC	DPST	6.10
5849	PR11AY	6 AC	DPDT	7.10
6752	PR11AY	12 AC	DPDT	7.10
5964	PR11AY	24 AC	DPDT	7.10
5663	PR11AY	120 AC	DPDT	7.10
5655	PR11AY	240 AC	DPDT	7.65
6103	PR11AL5	6 AC	*DPDT	9.00
6109	PR11AL5	12 AC	*DPDT	9.00
6753	PR11AL5	24 AC	*DPDT	9.00
6755	PR11AL5	120 AC	*DPDT	9.00
6756	PR11AL5	240 AC	*DPDT	9.45
6508	PR11DY	6 DC	DPDT	7.10
6512	PR11DY	12 DC	DPDT	7.10
6514	PR11DY	24 DC	DPDT	7.10
5971	PR11DY	110 DC	DPDT	7.75

R MEDIUM-DUTY POWER RELAYS



general applications.
r contacts rated 8 amps
t MR3 types rated 10
AC coils for 60 Hz.
ctions normally open.
MR3 and MR5, $1\frac{11}{16}$x
$2\frac{31}{32}$"; MR11: 2x$2\frac{3}{16}$x
"; MR14: 2x$2\frac{3}{16}$x
. Av. shpg. wt., 5 oz.

k No.	Type	Volts	Action	EACH
5975	MR3A	6 AC	SPST	4.30
5978	MR3A	24 AC	SPST	4.30
5665	MR3A	120 AC	SPST	4.30
5983	MR3D	6 DC	SPST	3.90
5187	MR3D	12 DC	SPST	3.90
5988	MR3D	24 DC	SPST	3.90
5610	MR5A	6 AC	SPDT	3.85
6757	MR5A	12 AC	SPDT	3.85
5979	MR5A	24 AC	SPDT	3.85
5614	MR5A	120 AC	SPDT	3.85
5657	MR5A	240 AC	SPDT	4.30
5618	MR5D	6 DC	SPDT	3.55
5188	MR5D	12 DC	SPDT	3.55
5989	MR5D	24 DC	SPDT	3.55
6760	MR5D	110 DC	SPDT	4.10
5612	MR11A	6 AC	DPDT	5.40
6758	MR11A	12 AC	DPDT	5.40
5981	MR11A	24 AC	DPDT	5.40
5616	MR11A	120 AC	DPDT	5.40
5659	MR11A	240 AC	DPDT	5.85
5985	MR11D	6 DC	DPDT	5.15
5190	MR11D	12 DC	DPDT	5.15
5991	MR11D	24 DC	DPDT	5.15
6761	MR11D	110 DC	DPDT	5.65
5976	MR14A	6 AC	3PDT	6.45
6759	MR14A	12 AC	3PDT	6.45
5982	MR14A	24 AC	3PDT	6.45
5972	MR14A	120 AC	3PDT	6.45
5974	MR14A	240 AC	3PDT	6.85
5986	MR14D	6 DC	3PDT	6.10
5191	MR14D	12 DC	3PDT	6.10
5992	MR14D	24 DC	3PDT	6.10
6762	MR14D	110 DC	3PDT	6.60

KRP ENCLOSED RELAYS

Completely enclosed compact relays in hi-impact, transparent, plastic cases. Fully dustproof and weatherproof for long, trouble-free operation. Types KRP5 and KRP11 plug into standard octal sockets; Type KRP14 plugs into 11-pin socket. Gold-flashed silver contacts rated 5 amps at 120 VAC, 60 Hz resistive. $1\frac{13}{32}$x$1\frac{13}{32}$x2". Av. shpg. wt., 5 oz.

Stock No.	Type	Volts	Action	EACH
41 A 5214	KRP5A	6 AC	SPDT	6.00
41 A 5215	KRP5A	24 AC	SPDT	6.00
41 A 5213	KRP5A	120 AC	SPDT	6.00
41 A 5217	KRP5D	6 DC	SPDT	5.95
41 A 5244	KRP5D	12 DC	SPDT	5.95
41 A 5245	KRP5D	24 DC	SPDT	5.95
41 A 5240	KRP5D	110 DC	SPDT	6.60
41 A 5920	KRP11A	6 AC	DPDT	6.65
41 A 6524	KRP11A	12 AC	DPDT	6.65
41 A 5216	KRP11A	24 AC	DPDT	6.65
41 A 5921	KRP11A	120 AC	DPDT	6.65
41 A 6597	KRP11A	240 AC	DPDT	7.10
41 A 5922	KRP11D	6 DC	DPDT	6.60
41 A 5246	KRP11D	12 DC	DPDT	6.60
41 A 5247	KRP11D	24 DC	DPDT	6.60
41 A 6352	KRP11D	110 DC	DPDT	7.30
41 A 5091	KRP14A	6 AC	3PDT	8.30
41 A 6525	KRP14A	12 AC	3PDT	8.30
41 A 5092	KRP14A	24 AC	3PDT	8.30
41 A 5093	KRP14A	120 AC	3PDT	8.30
41 A 5557	KRP14A	240 AC	3PDT	8.70
41 A 5094	KRP14D	6 DC	3PDT	8.20
41 A 5095	KRP14D	12 DC	3PDT	8.20
41 A 5096	KRP14D	24 DC	3PDT	8.20
41 A 6998	KRP14D	110 DC	3PDT	8.85

KCP ENCLOSED RELAYS

Plate circuit relays. In high-impact, weatherproof plastic cases. Fit standard octal or 11-pin socket (at right, below). 2 amp resistive, silver contacts. $1\frac{13}{32}$" sq. by 2". Wt., 4 oz.

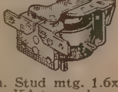
Stock No.	Type	Ohms	mA	Action	EACH
41 A 5287	KCP5	2500	7.2	SPDT	6.50
41 A 5288	KCP5	5000	5.0	SPDT	6.60
41 A 5289	KCP5	10,000	3.6	SPDT	7.05
41 A 5290	KCP11	2500	10.0	DPDT	6.95
41 A 5291	KCP11	5000	7.2	DPDT	7.05
41 A 5292	KCP11	10,000	5.0	DPDT	7.50
41 A 5097	KCP14	2500	12.3	3PDT	8.55
41 A 5098	KCP14	5000	8.7	3PDT	8.65
41 A 5099	KCP14	10,000	6.1	3PDT	9.10

KT ANTENNA-SWITCHING RELAYS

For selecting either of two antennas or for switching single antenna from receiver to transmitter and vice-versa. Designed for RF applications; glass base insulation for minimum loss. Will switch 300-ohm line. All are DPDT. Mtg.: 6-32 stud. Silver 5-amp contacts. Size: 1¼x1⅝x$1\frac{11}{16}$". Shpg. wt., 2 oz.

Stock No.	Type	Volts	EACH
41 A 6373	KT11A	6 AC	4.10
41 A 6374	KT11A	120 AC	4.10
41 A 6375	KT11D	6 DC	4.10
41 A 6376	KT11D	12 DC	4.10

KR3 POWER RELAYS



Open double-break relay with copper alloy contact arms and silver-cadmium-oxide contacts rated at 20 amps, 120 VAC, 60 Hz resistive, or 28 VDC; 1 HP 120/240V, 60 Hz, SPST-.N.O-DB (1 Form X) action. Stud mtg. 1.6x 1.67x1.52". Same coil rating as KA type, above right. *Enclosed type, similar to KRP illus. above. Av. shpg. wt., 8 oz.

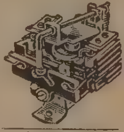
Stock No.	Type	Volts	EACH
41 A 5132	KR3AH	24 AC	4.30
41 A 5133	KR3AH	120 AC	4.30
41 A 5134	KR3DH	6 DC	4.10
41 A 5135	KR3DH	12 DC	4.10
41 A 5136	KR3DH	24 DC	4.10
41 A 5137	KR3DH	110 DC	4.70
41 A 5138	KRP3AH*	24 AC	7.00
41 A 5139	KRP3AH*	120 AC	7.00
41 A 5175	KRP3DH*	12 DC	6.75
41 A 5176	KRP3DH*	24 DC	6.75

KA GENERAL-PURPOSE RELAYS

Compact, general purpose relays for transmitters, power supply control, etc. Moisture resistant. Heavy-duty contacts rated at 5 amps AC coils for 60 Hz. All are ■ U.L. Recog. 6-32 mounting stud. $1\frac{11}{16}$x$1\frac{27}{32}$x $1\frac{15}{32}$". Shpg. wt., 6 oz.

Stock No.	Type	Volts	Action	EACH
41 A 5158	KA5AY	6 AC	SPDT	3.50
41 A 6780	KA5AY	12 AC	SPDT	3.50
41 A 5161	KA5AY	24 AC	SPDT	3.50
41 A 5164	KA5AY	120 AC	SPDT	3.50
41 A 5153	KA5AY	240 AC	SPDT	4.00
41 A 5167	KA5DY	6 DC	SPDT	3.35
41 A 5170	KA5DY	12 DC	SPDT	3.35
41 A 5173	KA5DY	24 DC	SPDT	3.35
41 A 6782	KA5DY	110 DC	SPDT	4.05
41 A 5159	KA11AY	6 AC	DPDT	4.25
41 A 6781	KA11AY	12 AC	DPDT	4.25
41 A 5162	KA11AY	24 AC	DPDT	4.25
41 A 5165	KA11AY	120 AC	DPDT	4.25
41 A 6783	KA11AY	240 AC	DPDT	4.65
41 A 5168	KA11DY	6 DC	DPDT	3.75
41 A 5171	KA11DY	12 DC	DPDT	3.75
41 A 5174	KA11DY	24 DC	DPDT	3.75
41 A 6522	KA11DY	110 DC	DPDT	4.40
41 A 5160	KA14AY	6 AC	3PDT	4.65
41 A 6779	KA14AY	12 AC	3PDT	4.65
41 A 5163	KA14AY	24 AC	3PDT	4.65
41 A 5166	KA14AY	120 AC	3PDT	4.65
41 A 5152	KA14AY	240 AC	3PDT	5.15
41 A 5169	KA14DY	6 DC	3PDT	4.25
41 A 5172	KA14DY	12 DC	3PDT	4.25
41 A 5185	KA14DY	24 DC	3PDT	4.25
41 A 6523	KA14DY	110 DC	3PDT	4.90

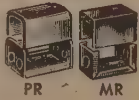
PC IMPULSE RELAYS



Compact, pulse-operated relay. For on-off or reversing applications. Pulses may be as short as 60 milliseconds at 5 Hz. Gold-flashed silver contacts, rated 7.5 amps at 120 volts AC, resistive load. Size: $2\frac{1}{16}$x$2\frac{31}{32}$ x$2\frac{5}{64}$". Shpg. wt., 5 oz.

Stock No.	Type	Volts	Action	EACH
41 A 6504	PC11A	6 AC	DPDT	6.20
41 A 6728	PC11A	12 AC	DPDT	6.20
41 A 6502	PC11A	24 AC	DPDT	6.20
41 A 6500	PC11A	120 AC	DPDT	6.20
41 A 6726	PC11D	6 DC	DPDT	6.00
41 A 6111	PC11D	12 DC	DPDT	6.00
41 A 6506	PC11D	24 DC	DPDT	6.00
41 A 6503	PC17A	24 AC	4PDT	8.55
41 A 6501	PC17A	120 AC	4PDT	8.55
41 A 6507	PC17D	24 DC	4PDT	8.35

RELAY CASES AND SOCKETS



PR Relay Case. Steel base with aluminum cover. 4—knockouts for ½" conduit. Mtg.: 3—No. 10 holes on 1⅞x4⅛" centers. Size, 3⅛x$5\frac{5}{16}$x3⅜". Shpg. wt., 1 lb.
41 A 6777........**3.45**

MR Relay Case. Steel base with a slip-on aluminum cover. 2—knockouts for ½" conduit. Mounts on pre-drilled holes. Wt., 1 lb.
41 A 6778..........................**Each 2.20**

Amphenol 77MIP8 Socket. For KRP and KCP relays. For all relays except KRP14 and KCP14. Octal type. Requires $1\frac{5}{32}$" hole. Mtg. centers, 1½". Wt., 1 oz.
47 A 0028..........................**Each .21**

Amphenol 77MIP11 Socket. For KRP14 and KCP14 types. Molded bakelite. Mounts in $1\frac{5}{32}$" hole; 1½" mtg. ctrs. 11-pin. 1 oz.
47 A 0033..........................**Each .29**

TYPE "P" RELAY CASES

Model 35D070. Clear, cellulose acetate. For mtg. resistors, capacitors, etc. Octal-type plug. Same case as used with KRP and KCP relays. 4 mtg. screws. Use with 9-KR-15 hold-down spring (below) for special applications. $1\frac{13}{32}$x $1\frac{13}{32}$x 2". Shpg. wt., 1 oz.
41 A 5558........**Each .65**

41 A 5559. Type D072 Same as above. but with 11-pin plug. Shpg. wt., 1 oz.....**Each .80**

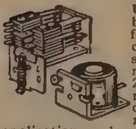
Type 9-KR-15 Hold-Down Spring. For horizontal, inverted, and vibration-secure mounting of KCP and KRP relays. Stainless steel; two $\frac{5}{32}$" mtg. holes on $1\frac{5}{16}$" ctrs. 3 oz.
41 A 5554...............**Box of 50 for 5.80**

cognized Under the Component Program of Underwriter's Laboratories, Inc.

Knight® and Potter & Brumfield Relays

POTTER & BRUMFIELD RELAYS

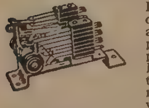
GP "PIC AND BUILD" SERIES



Units available can be combined to produce twenty different relays, each easily converted to an alternative sensitivity or switching arrangement in minutes. The 24 V DC coil is approximately 300 ohms. The 2500 ohm and 10,000 ohm coils may be used in plate circuit applications and can be adjusted to operate on 13 mA and 6.5 mA respectively. $\frac{1}{8}$" diameter switch contacts are rated at 5 amps. Has tapped core to permit mounting with single 8-32 screw. Size, 1x1$\frac{11}{16}$x1$\frac{25}{32}$". Av. wt., 4 oz.

Stock No.	Mfr's Type	Description	EA.
41 A 6333	GPA	6 V AC Coil	1.85
41 A 6539	GPA	12 V AC Coil	1.85
41 A 6334	GPA	24 V AC Coil	1.85
41 A 6335	GPA	120 V AC Coil	1.85
41 A 6337	GPD	6 V DC Coil	2.30
41 A 6338	GPD	12 V DC Coil	2.30
41 A 6339	GPD	24 V DC Coil	2.30
41 A 6341	GPD	2500-ohm Coil	1.70
41 A 6342	GPD	10,000-ohm Coil	2.30
41 A 6343	GP11	DPDT Switch	1.90
41 A 6344	GP17	4PDT Switch	3.25

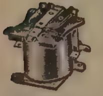
AP RATCHET IMPULSE RELAYS



Fast acting for uses requiring on-off or reversing action on alternate impulses. Operates on impulses as short as 60 ms. Intermittent duty. Contacts are $\frac{3}{16}$" fine silver, rated 5 amps. Coils are wound on molded bobbins. Phenolic cams, hardened steel pawl and ratchet with pin hinged armature. Tinned solder terminals. Mounting: Three $\frac{5}{32}$" diam. holes on 3$\frac{3}{8}$x$\frac{7}{8}$" triangular centers. Size: 2$\frac{5}{16}$x2$\frac{1}{4}$x3$\frac{3}{4}$". AC types for 50-60 Hz. 12 oz.

Stock No.	Type	Volts	Action	EACH
41 A 5997	AP11A	6 AC	DPDT	9.65
41 A 6581	AP11A	12 AC	DPDT	9.65
41 A 5993	AP11A	120 AC	DPDT	9.65
41 A 6583	AP11A	240 AC	DPDT	10.20
41 A 6585	AP11D	6 DC	DPDT	9.65
41 A 5999	AP11D	24 DC	DPDT	9.65
41 A 6589	AP11D	110 DC	DPDT	10.40
41 A 5994	AP17A	120 AC	4PDT	11.70
41 A 6588	AP17D	12 DC	4PDT	11.70
41 A 5778	AP17D	24 DC	4PDT	11.70

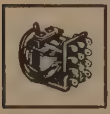
RS5D LIGHTWEIGHT RELAYS



Compact sensitive relays designed for radio-sonde, light-dimmer, and model applications. Sensitivity of 60 milliwatts. Life of over 10 million operations. Operate in 25 milliseconds and release in less than 5 milliseconds. SPDT contacts are bar palladium, rated at 2 amps. Current actuated, except *voltage actuated. Insulation resistance of 100 megs minimum. Two 4-40 tapped holes on $\frac{5}{8}$x$\frac{3}{4}$" diagonal centers. May be mounted in Type "P" craze-resistant transparent plastic case, or with KCP-KRP hold-down spring. Size: 1$\frac{5}{16}$x1x1$\frac{11}{64}$". Av. shpg. wt., 2 oz.

Stock No.	Coil Ohms	mA	EACH
41 A 5896	335	6 VDC*	2.90
41 A 5504	1350	12 VDC*	2.05
41 A 5897	2500	5.0	3.15
41 A 5898	5000	3.5	3.45
41 A 5899	10,000	2.5	4.00

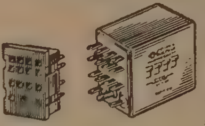
KM SUBMINIATURE RELAYS



For multiple switching use in small business machines, alarm systems, communications. Withstand 30g shock. Weigh 0.58 oz. $\frac{3}{32}$" silver contacts rated 2 amps. Solder terminals. Mtg. by 2 56 tapped core, locating half punch. Size 1$\frac{1}{8}$x$\frac{53}{64}$x$\frac{35}{64}$". Shpg. wt., 1 oz.

Stock No.	Mfr's Type	Coil Volts	Action	EACH
41 A 6361	KM5D	6 DC	SPDT	3.80
41 A 6362	KM5D	12 DC	SPDT	3.80
41 A 6363	KM5D	24 DC	SPDT	3.80
41 A 6365	KM11D	6 DC	DPDT	4.15
41 A 6366	KM11D	12 DC	DPDT	4.15
41 A 6367	KM11D	24 DC	DPDT	4.15
41 A 6369	KM14D	6 DC	3PDT	4.80
41 A 6370	KM14D	12 DC	3PDT	4.80
41 A 6371	KM14D	24 DC	3PDT	4.80

KHP MINIATURE 4PDT RELAYS

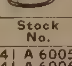


Compact, rugged 4PDT relays for data processing, computer control, etc. Come with nylon dust cover. Gold-flashed silver contacts rated 3 amps at 30 V DC or 120 V AC resistive, except types with suffix "12" have silver-cadmium-oxide contacts. Coil power: DC, 900 milliwatts; AC, 1.2 VA. Solder terminals with 3-48 mtg. stud, $\frac{5}{16}$" long. Fit sockets (below) with either printed circuit or solder lug terminals. Contacts rated for 100,000 operations. Size: 1$\frac{9}{32}$x1$\frac{7}{64}$x$\frac{55}{64}$" maximum. Shpg. wt., 2 oz.

Stock No.	Mfr's Type	Coil		EA.
		Volts	Ohms	
41 A 4252	KHP17A11	6 AC	10.5	5.55
41 A 4253	KHP17A11	12 AC	43	5.55
41 A 4254	KHP17A11	24 AC	160	5.55
41 A 4255	KHP17A11	120 AC	3900	6.05
41 A 7675	KHP17D11	6 DC	40	5.05
41 A 7676	KHP17D11	12 DC	160	5.05
41 A 7677	KHP17D11	24 DC	650	5.05
41 A 7678	KHP17D11	48 DC	2600	5.25
41 A 7680	KHP17D11	90 DC	9000	5.90
41 A 7679	KHP17D11	110 DC	11000	5.90
41 A 6045	KHP17D12	24 DC	650	5.20
41 A 6046	KHP17D12	110 DC	11000	6.05

SOCKETS FOR KHP RELAYS

41 A 5940	9KH1	Solder Term.	.70
41 A 5990	9KH2	PC terminal	.70

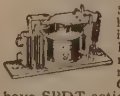


BU AC-OPERATED BUZZERS

Spring-steel armature buzzes when coil is energized. 1$\frac{1}{32}$x1$\frac{1}{32}$x1$\frac{3}{8}$". Mtg., 6-32 tapped core. 2 oz.

Stock No.	AC Volts	Power VA	Coil Ohms	EACH
41 A 6005	6	4.6	2.75	1.95
41 A 6006	12	4.6	13.25	1.95
41 A 6007	24	4.6	50.00	1.95
41 A 6008	115	4.6	1250.00	1.95

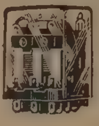
LB-5 SENSITIVE RELAYS



Small, fast-acting circuit relays. For any circuit supplying only a few milliwatts of DC. Breakdown: 500 volts rms minimum. Silver contacts are rated 5 amps at 120 V. AC, 60 Hz resistive. All units have SPDT action. Adjusted by bending tail-spring hook. Size, 2$\frac{21}{32}$x1$\frac{1}{4}$x1$\frac{3}{8}$". For DC operation only. Shpg., wt., 5 oz.

Stock No.	Ohms	mA	EACH
41 A 5625	2500	9	2.85
41 A 5626	5000	6.3	3.05
41 A 5774	10,000	4.5	3.30

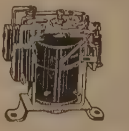
KUP PLUG-IN 10 AMP RELAYS



Reliable 10 ampere relay f industrial control applic tions. Designed for conti uous operation. Silver-ca mium oxide contacts for lo life. Enclosed in clear, hi impact plastic dust cover. C Power: 1.2 watts DC; 2 V AC except KUP14, 2.75 V Quick-connect .187" sold terminals. For use with type 9KU1 molde nylon socket (below) with pierced solder te minals. Size: 1.531x1.406x1.906" max. Shp wt., 3 oz.

Stock No.	Mfr's Type	Coil Volts	Action	E
41 A 4972	KUP5A15	6 AC	SPDT	3.9
41 A 4973	KUP5A15	12 AC	SPDT	3.9
41 A 4974	KUP5A15	24 AC	SPDT	3.9
41 A 4975	KUP5A15	120 AC	SPDT	3.9
41 A 4976	KUP5A15	240 AC	SPDT	4.3
41 A 4977	KUP5D15	6 DC	SPDT	3.7
41 A 4978	KUP5D15	12 DC	SPDT	3.7
41 A 4979	KUP5D15	24 DC	SPDT	3.7
41 A 4980	KUP5D15	110 DC	SPDT	4.3
41 A 4981	KUP11A15	6 AC	DPDT	4.7
41 A 4982	KUP11A15	12 AC	DPDT	4.7
41 A 4983	KUP11A15	24 AC	DPDT	4.7
41 A 4984	KUP11A15	120 AC	DPDT	4.7
41 A 4985	KUP11A15	240 AC	DPDT	5.1
41 A 4986	KUP11D15	6 DC	DPDT	4.2
41 A 4987	KUP11D15	12 DC	DPDT	4.2
41 A 4988	KUP11D15	24 DC	DPDT	4.2
41 A 4989	KUP11D15	110 DC	DPDT	4.9
41 A 4990	KUP14A15	6 AC	3PDT	5.3
41 A 4991	KUP14A15	12 AC	3PDT	5.3
41 A 4992	KUP14A15	24 AC	3PDT	5.3
41 A 4993	KUP14A15	120 AC	3PDT	5.3
41 A 4994	KUP14A15	240 AC	3PDT	5.7
41 A 4995	KUP14D15	6 DC	3PDT	4.9
41 A 4996	KUP14D15	12 DC	3PDT	4.9
41 A 4997	KUP14D15	24 DC	3PDT	4.9
41 A 4998	KUP14D15	110 DC	3PDT	5.3
41 A 4999	9KU1	Solder term. socket		.7

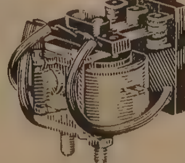
LM SENSITIVE RELAYS



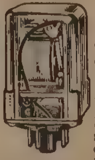
For photoelectric and sim lar circuits. Medium-cos high quality, current-act ated relays. Pull-in adjus able by tail spring adjustin screw. DC coils only. Silv contacts rated 5 amps, 1 V 60 Hz, non-inducti load. Have 100 milliwa sensitivity for single-pol 200 mW for double-pol *SPDT; †DPDT. Sizes are: LM5, 2$\frac{5}{16}$x1 2$\frac{7}{16}$": LM11, 2$\frac{3}{16}$x2$\frac{5}{32}$x2$\frac{1}{2}$". Av. shpg. wt., 9 o

Stock No.	Type	Ohms	mA	EACH
41 A 5673	LM5*	2500	6.3	4.35
41 A 5674	LM5*	5000	4.5	4.55
41 A 5675	LM5*	10,000	3.2	4.90
41 A 5682	LM11†	2500	9.0	6.20
41 A 5683	LM11†	5000	6.3	6.40
41 A 5684	LM11†	10,000	4.5	7.05

KNIGHT RELAYS



Open Type



Enclosed Type

- Life Expectancy Exceeds 5,000,000 Operations
- Molded Nylon Bobbins
- Modular Construction

Meet exacting requirements over a tremendous range of applications. In either open or enclosed plug-in types. Built-in contact wipe with riveted contacts. Phenolic terminal blocks. Independently riveted coil terminals. Enclosed types have crackproof dust covers of clear, poly carbonate resin. Silver alloy gold-flashed contacts rated 10 amps at 115 VAC or 32 VDC, noninductive.

OPEN TYPES

Tinned solder terminals. 6-32 mtg. hole. U.L. Comp. Prog. Recog. 1$\frac{11}{32}$x1$\frac{3}{8}$x1$\frac{3}{4}$". 2 oz.

Stock No.	Coil		Action	EACH
	Volts	Ohms		
41 A 4650	12 AC	20	SPDT	3.15
41 A 4651	24 AC	75	SPDT	3.15
41 A 4652	115 AC	1500	SPDT	3.15
41 A 4653	12 DC	150	SPDT	3.00
41 A 4654	24 DC	600	SPDT	3.00
41 A 4655	12 AC	20	DPDT	3.70
41 A 4656	24 AC	75	DPDT	3.70
41 A 4657	115 AC	1500	DPDT	3.70
41 A 4658	12 DC	150	DPDT	3.35
41 A 4659	24 DC	600	DPDT	3.35
41 A 4660	110 DC	10,000	DPDT	3.95
41 A 4661	115 AC	1500	3PDT	4.20
41 A 4662	24 DC	600	3PDT	3.85

PLUG-IN ENCLOSED TYPES

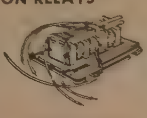
SPDT and DPDT use std. octal plug; 3PDT, 11-pin plug. 1$\frac{31}{32}$x1$\frac{13}{32}$x1$\frac{13}{32}$". 3 oz.

Stock No.	Coil		Action	EACH
	Volts	Ohms		
41 A 4663	12 AC	20	SPDT	5.45
41 A 4664	24 AC	75	SPDT	5.45
41 A 4665	115 AC	1500	SPDT	5.45
41 A 4666	12 DC	150	SPDT	5.40
41 A 4667	24 DC	600	SPDT	5.40
41 A 4668	12 AC	20	DPDT	6.05
41 A 4669	24 AC	75	DPDT	6.05
41 A 4670	115 AC	1500	DPDT	6.05
41 A 4671	12 DC	150	DPDT	6.10
41 A 4672	24 DC	600	DPDT	6.10
41 A 4673	110 DC	10,000	DPDT	6.70
41 A 4677	115 AC	1500	3PDT	7.50
41 A 4678	24 DC	600	3PDT	7.45

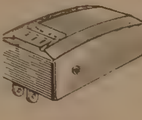
Relays, Photorelays, and Motors

ALCO REMOTE-CONTROL ISOLATION RELAYS

v-Voltage Control Up to 110 Volts
e Booklet Gives Typical Uses for Relay


FR-101, FR-102

. FR-101 AND FR-102 BASIC RELAYS. Pro-w-voltage control of high-voltage cir- Combine step-down transformer and ve AC relays in a single laminated core uction. 110 VAC operation, but relay n is activated by shorting the safe low- e provided by transformer. With dust Av. shpg. wt., 5 oz.


FRE-103

L FRE-103 PLUG-IN. Similar to SPDT FR- ut with plug for standard AC wall out- nd 3-way receptacle for selection of or N. C. controlling circuit. Miniature n side serves as plug-in for remote-con- g unit. Av. shpg. wt., 5 oz.

SPECIFICATIONS

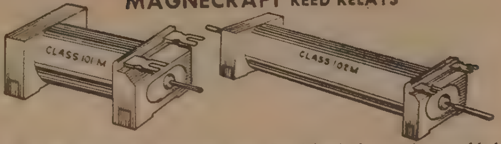
ıum Load: 5 amps at 117 volts.
ting Voltage: 95 to 125 volts.
t Consumed: Under 40 mA.
d Voltage: Under 30 volts.
als: Types FR-101 and FR-102, 6" leads;
ıe FRE-103, plug-in.
ver 50,000 operations.
ith Cover: 2⅛x1¾x1¼".

ock o.	Mfr's Type	Contact Action	EACH
4292	FR-101	SPST Basic	3.85
4293	FR-102	SPDT Basic	4.45
4294	FRE-103	SPDT Plug-in	4.95

***FREE!* Booklet**

With Each Relay. Describes 28 Basic Design Ideas. Clear, Complete.

MAGNECRAFT REED RELAYS



Rugged design at minimum cost. Reed leads fastened to molded bobbin for stress relief. High speed operation, sealed contacts.

TYPE 101M: SPST, normally open. Cont. rated 12 VA @ ¼ amp or 100 VAC max. Coil, 600 mW. Operating time, 1 ms, release, ½ ms. Avg. life, 5 million cycles. 1½x½x7⁄16".

TYPE 102M: Cont. rated 15 VA @ 1 amp or 250 VAC max. Coil, 300 mW. Oper. time, 3 ms, release, ½ ms. Avg. life, 20 million cycles. 3½x19⁄32x½". Shpg. wt.: 101M, 2 oz.; 102M, 3 oz.

CLASS 101M SPST—N.O. MINIATURE REED RELAY

Stock No.	Mfr's Type	Coil mA	Coil VDC	Coil ±10% Ohms	EACH
41 A 4440	W101MX-1	......	6	100	2.20
41 A 4441	W101MX-2	......	12	250	2.25
41 A 4442	W101MX-3	......	24	500	2.25
41 A 4443	W101MX-4	9	....	2500	2.43

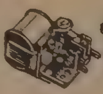
CLASS 102M SPST—N.O. STANDARD-SIZE REED RELAY

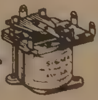
Stock No.	Mfr's Type	Coil mA	Coil VDC	Coil ±10% Ohms	EACH
41 A 4444	W102MX-1	40	....	100	2.18
41 A 4445	W102MX-2	......	6	200	2.25
41 A 4446	W102MX-3	......	12	500	2.25
41 A 4447	W102MX-4	......	24	2000	2.47
41 A 4448	W102MX-5	5.5	....	5000	2.63

SIGMA RELAYS AND PHOTORELAY COMPONENTS

RELAYS

4F. Plate circuit for any 20 or 50 ensitivity applica- SPDT contacts 2 A. For smoke tion, burglar s. 1½x1⅝x15⁄32". pg. wt., 3 oz.


4F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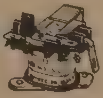

11

ck No.	Mfr's Type	Ohms	mA DC	EACH
A 6377	4F-1000-S/SIL	1000	4.5	6.85
A 6378	4F-2500-S/SIL	2500	3.0	6.85
A 6379	4F-5000-S/SIL	5000	2.0	7.20
A 5285	4F-8000-S/SIL	8000	1.6	7.45
A 6127	4F-10000-S/SIL	10,000	1.4	7.45

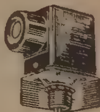
55. Small, sensitive relays. SPDT contacts rated 1A. Screw 2 #4-40 holes spaced .888" apart). Solder terminals. 1 oz.

ck No.	Mfr's Type	Ohms	Contacts	EACH
A 6612	65F1A-12 DC	1640	SPDT	1.50
A 6613	65F1A-24 DC	6560	SPDT	1.50

1. For on-off circuits with gradually changing current; SPDT contacts: 1 A at 28 VDC/120 VAC. Sens., 50 mW. ■U.L. ., C.S.A. Listed. Solder terms. 11⁄16x13⁄16x17⁄32". 3 oz.

Stock No.	Mfr's-Type and Coil Ohms	mA DC	EACH
A 7681	11F-250-G/SIL	14.0	2.45
A 7683	11F-550-G/SIL	9.5	2.45
A 5068	11F-1000-G/SIL	7.0	2.45

INTEGRAL 2-PART PHOTORELAY SYSTEMS

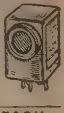


Ideal for materials handling, packaging, production, processing. Solid-state, with high reliability cells.

TYPE 8P3. Will provide up to 600 operations per minute. Has a 10-A resistive rating at 28 VDC or 115 VAC, and 5 A at 230 VAC. Designed to give up to 10 million mechanical operations. Operates up to 12 feet from light source. Has SPDT contact arrangement.

LIGHT SOURCE 8L3-115. May be used with your own light source, or with the 8L3-115 Light Source listed in the table below. Leads are #18 AWG, with an average 18" length. Operating temperature range, +32° to +122°F.

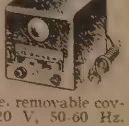
Stock No.	Mfr's Type	Mounting and Size	Wt., Oz.	EACH 1-9
41 A 6190	8P3-115	½" conduit fitting, mounting bracket 2½x129⁄32x311⁄16"	13	20.90
41 A 6191	8L3-115	Light source for 8P3-115 listed above	13	15.20



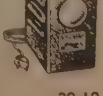
TYPE 8R PHOTORELAYS. Use CdS photocells. Tubeless. For applications requiring "light-no-light" conditions. 5 ft.-candles are needed to operate. *0.1, †0.5 to release. Contacts are rated 5 amps. Aluminum dust covers. 1⅞x1½x1½". 115 V, 60 Hz AC. Wt., 4 oz.

Stock No.	Mfr's Type	Contacts	Base	EACH
41 A 6108	8RC01A*	SPDT	5-pin	17.25
41 A 6251	8RC02A†	SPDT	5-pin	17.25

WORNER PHOTORELAYS

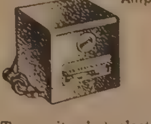


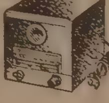
L 103 PHOTOCELL- FIER-RELAY. Operates 450 times per min- ith a 2" object in- pting light beam. cell operates relay at 12½ amps. Shield cts photocell from neous light. Steel case, removable cov- x5x5½". For 110-120 V, 50-60 Hz. Shpg. wt., 5 lbs.
7349. .... 46.68



EL 101 FIXED LIGHT CE. Use with Model 103. cts fixed beam up to 10 Objects 2" square and will interrupt beam and ate solenoid, counter, etc. merloid-finished steel 2½x4½x4". Instr. 110- , 50-60 Hz.
7343. Shpg. wt., 2 lbs.........20.10

WORNER 4000 "WATCHMAN"

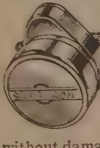

Amplifier


Light Source

Two-unit photoelectric system for actuating burglar alarms. Light-source has infrared filter for invisible beam. Switch for continuous or momentary alarm. Sensitivity control. 6-V output for alarm. For indoor use at distances to 50 ft. 5x5x5½". For 110-120 V, 50-60 Hz AC. 11¾ lbs.
41 A 7232 U 96.30

MODEL 5100. (Not illus.) As above, but has meter jack for plate-circuit test and alarm setting protected by lock. For up to 100 ft. For 110-120 V, 50-60 Hz AC. 14 lbs.
41 A 7441 U........................134.67

HANSEN "SYNCHRON" MOTORS

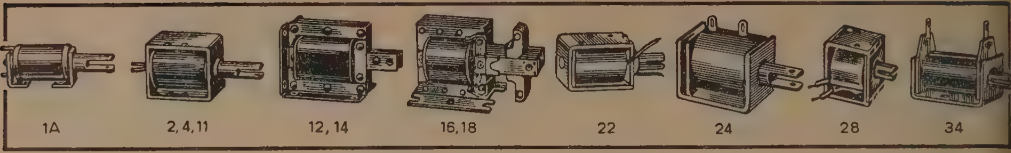


Hysteresis-synchronous timing motors. Sealed gear case, brass gears. 1-piece steel pinions with phenolic first gear. Has positive direction of rotation. Double bearings on rotor shaft, reduction train and output shaft. Can be stalled without damage at speeds of 1 rpm or faster. K12RC: has 4-W "K" coil; 20 in.-oz. torque at 1 rpm. I12RC: 3-W "I" coil; 30-in.-oz. torque at rated speed. All have Type 12 flatted shaft, ½" dia. x ⅜" long. Clockwise rotation (facing shaft). Two mtg. holes, .142" dia., spaced 1.875". 110 V, 60 Hz AC. **Specify Motor Speed** K12RC: 1, 2, 3, 4, 6, 10, 30, 50, 60 rpm; I12RC: 1, 2, 4, 10, or 12 rph. Av. shpg. wt., 12 oz.

41 A 5800 C. K12RC. 1-60 rpm...**Each 5.10**
41 A 5801 C. I12RC. 1 or 2 rph...**Each 5.02**
41 A 5802 C. I12RC. 4-12 rph....**Each 5.02**

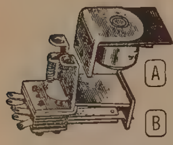
ognized Under the Component Program of Underwriter's Laboratories, Inc.

Relays, Solenoids and Motors



GUARDIAN RELAYS AND SOLENOIDS

UNIVERSAL "200" SERIES COILS



Universal interchangeable parts for assembling custom relays. Listings include AC, DC, and plate coils (A), and switch contact assemblies (B), Complete relay requires one coil and one contact assembly. For additional contacts use the contact switch parts kit. Contact ratings given are at 115 V, 60 Hz AC, non-inductive load. Size, with standard contact assembly, 2⅞x1⅛x1¾"; midget assembly, 2 1/16x1⅛x 1½". Av. shpg. wt., 4 oz.

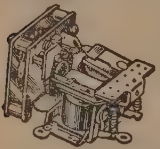
AC Coils			DC Coils		
Stock No.	Volts	EACH	Stock No.	Volts	EACH
41 A 5709	6	1.85	41 A 5713	6	2.00
41 A 5710	12	1.85	41 A 5714	12	2.00
41 A 5711	24	1.85	41 A 5715	24	2.00
41 A 5712	120	2.15	41 A 5717	110	2.65
41 A 5888	240	2.85	....	....	....

41 A 5779. **Type 200-5000 D Plate Coil.** 5000 ohms. 3 oz.......2.30
41 A 5109. **Type 200-10,000 D Plate Coil.** 10,000 ohms. 3 oz.....2.65

SERIES 200 SWITCH CONTACT ASSEMBLIES FOR USE WITH COILS ABOVE

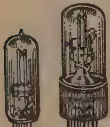
Stock No.	Mfr's Type	Description	EACH
41 A 5707	200-1	SPDT std. contact assembly. 8 amps	1.60
41 A 5708	200-2	DPDT std. contact assembly. 8 amps	2.10
41 A 5724	200-4	DPDT std. contact assembly. 12.5 amps	2.35
41 A 5889	200-5	4PDT std. contact assembly. 8 amps.	3.70
41 A 5718	200-M1	SPDT midget contact assembly. 8 amps	1.50
41 A 5719	200-M2	DPDT midget contact assembly. 8 amps	1.85
41 A 5826	200-M5	4PDT midget contact assembly. 8 amps	3.00

MER-115 MIDGET STEPPING RELAY



Electrical-reset stepping relay with 21 active positions. Resets from an external control on its own contacts. Contacts are rated at 1 amp at 115 V, 60 Hz, non-inductive. Stepping and reset coils 115 V, 60 Hz AC. Minimum set pulse. 50 ms; reset, 10 ms. Recommended for experimental purposes ,original equipment or replacement. 3¼x2 3/16x3¼".
41 A 5282. Shpg. wt., 13 oz..........15.75

AMPERITE TIME DELAY RELAYS



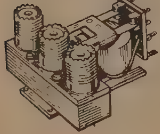
Hermetically sealed in glass envelope with octal base Heater draws 2 watts. Contacts: SPST. 3 amps at 115 VAC, 1 amp at 220 VAC. Voltage Breakdown: Contacts, 800 V; Heater-to-Contact, 800 V, except* 250 V and 500 V for delays of 10 sec. or less. Ambient temperatures from —55° to +70° C. Diameter, 1 9/32". Height less prongs, 2⅞". Shpg wt. 4 oz. *Be sure to specify Type Number as well as Stock No.*

Delay Seconds	Type No. Normally Open			Type No. Normally Closed		
	6.3 V	26 V	115 V	6.3 V	26 V	115 V
2*	6N02	26N02	115N02	6C2	26C2	115C2
3*	....	26N03	115N03	......	26C3	115C3
5*	6N05	26N05	115N05	6C5	26C5	115C5
10*	6N010	26N010	115N010	6C10	26C10	115C10
15	6N015	26N015	115N015	......	26C15	115C15
20	6N020	26N020	115N020	......	26C20	115C20
30	6N030	26N030	115N030	6C30	26C30	115C30
45	6N045	....	115N045	......	....	115C45
60	6N060	26N060	115N060	6C60	26C60	115C60
120	6N0120	26N0120	115N0120	6C120	26C120	115C120
180	6N0180	26N0180	115N0180	6C180	26C180	115C180

41 A 5295 C.. ....Each 2.40

Miniature Relays. All types listed in above table, are also available in miniature size except 150 and 180-second units. 9-pin, ¾x2⅝". Shpg. wt., 3 oz. *Specify Type No., adding letter "T" following Type Number. Example: 6N02T.*
41 A 5296 C..Each 2,40

MAGNECRAFT COAXIAL RELAYS



SPDT silver cadmium oxide, gold flashed contacts. 100 watts RF power; 50 ohms impedance, VSWR 1.25: 1 maximum, 0-500 MHz. Operate, release time: 25 ms average. Overall size, 2⅝x 2⅞x1 7/16".

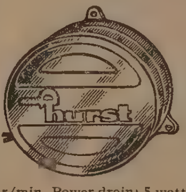
Stock No.	Mfr's Type	Volts	EACH
41 A 4000	W128AX-11	115 VAC	20.85
41 A 4001	W128X-14	12 VDC	20.02

INTERMITTENT-DUTY INDUSTRIAL SOLENOIDS

*Intermittent-duty types for applications not requiring energization fo more than 5 minutes with sufficient time between cycles for cooling Should not be permitted to rise more than 85°C above 24°C ambient without time to cool. †Continuous duty types will not rise more than 85°C above 24°C ambient temp. when operated at rated load. SPDT molded switch rated 10 A at 115 VAC. For switching SPDT contacts without addition of a relay in circuit. Intermittent duty solenoid switch can give continuous duty performance with the use of an externa resistor in conjunction with the switch. HD—heavy-duty.

Stock No.	Type	Volts	Stroke	Lift Oz.	Size	Lbs.	EA
41 A 5890	1A1*	115AC	1/8-1/2"	8	1 1/16x1 3/4x15/16"	1/4	3.1
41 A 5891	1A1†	115AC	1/8-1/2"	3	1 1/16x1 3/4x15/16"	1/4	3.1
41 A 5154	2*	115AC	1/8-7/8"	27	1 5/8x1 9/16x1 7/16"	3/4	3.6
41 A 5155	2†	115AC	1/8-7/8"	10½	1 5/8x1 9/16x1 7/16"	3/4	3.6
41 A 5892	4*	115AC	1/8-1"	24	1 5/8x2x1 7/16"	1	4.2
41 A 5893	4†	115AC	1/8-1"	8	1 5/8x2x1 7/16"	1	4.2
41 A 5828	12*	115AC	1/8-1"	42	1 7/16x1 5/8x1 3/16"	1/2	4.4
41 A 5829	12†	115AC	1/8-1"	22	1 7/16x1 5/8x1 3/16"	1/2	4.4
41 A 5595	11*	6DC	1/8-1"	39	1 3/16x1 5/16x1 27/32"	1/2	3.1
41 A 6318	11†	6DC	1/8-1"	26	1 3/16x1 5/16x1 27/32"	1/2	3.1
41 A 5596	11*	24DC	1/8-1"	39	1 3/16x1 5/16x1 27/32"	1/2	3.1
41 A 6319	11†	24DC	1/8-1"	26	1 3/16x1 5/16x1 27/32"	1/2	3.1
41 A 5894	14*	115AC	1/8-1 1/2"	110	2 1/16x2 7/16x1 7/8"	1 1/4	6.0
41 A 5895	14†	115AC	1/8-1 1/2"	65	2 1/16x2 7/16x1 7/8"	1 1/4	6.0
41 A 5156	16*	115AC	1/8-3/4"	96	1 7/16x1 5/8x1 1/8"	1/2	3.6
41 A 5885	16†	115AC	1/8-5/8"	54	1 7/16x1 5/8x1 1/8"	1/2	3.6
41 A 6320	16†	230AC	1/8-5/8"	54	1 7/16x1 5/8x1 1/8"	1/2	3.9
41 A 5157	18*	115AC	1/8-1"	304	2 1/16x2 1/2x1 13/16"	1	4.9
41 A 5886	18†	115AC	1/8-1"	145	2 1/16x2 1/2x1 13/16"	1	4.9
41 A 6321	18†	230AC	1/8-1"	145	2 1/16x2 1/2x1 13/16"	1	5.2
41 A 7554	24†	115AC	1/16-5/8"	16	59/64x27/32x1 1/4"	3/16	3.4
41 A 6099	28†	24DC	1/16-3/8"	24	1 3/16x1 5/16x1 1/8"	7/32	2.9
41 A 7566	22†	24DC	1/16-3/8"	13	3/4x3/4x1 1/8"	5/32	2.9
41 A 7402	34*	6DC	1/16-[illegible]/16"	17	1 7/64x1 1/8x8 3/4	5/32	2.3
41 A 7549	11*	115AC	1/8-1"	26	1 3/16x1 27/32x1 5/16	15/32	3.1
41 A 7409	4HD†	24DC	1/8-3/4"	86	1 5/8x1 7/16x2 1/64	15/16	6.4

HURST SYNCHRONOUS MOTORS



- CA, SM, PC-SM and EA Series
- Accurate, Cool-Running

CA Series—100 Inch-Ounce Reversible For continuous timing applications such a alarm systems, displays, process controls etc. Instantly reversible with SPDT switching; maintain accuracy both clockwise and counter-clockwise. Torque: 100 inch-ounce a 1 r/min. Case, 2½" dia. x 2⅛". Shaft, 3/16 dia., 1" long flattened. Power drain: 5 watts For 95-130 V, 60 Hz AC. Shpg. wt., 18 oz

SM Series—40-Inch-Ounce Unidirectional. Shaded pole, clockwise rotation. Instant start at full torque of 40 inch-ounce at 1 r/min. Power drain: 5 watts. Case, 2½" dia. x 1¾". Shaft, 3/16" dia. by 1 long. For 95-130 V, 60 Hz AC. Shpg. wt., 1 lb.

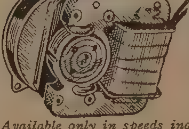
OUTPUT SPEEDS IN REVOLUTIONS PER MINUTE

⅓	2½	8†	20†	33⅓	64	160	800
½*	3*	10*†	24	40	80	200	1000
1* †	4*†	12†	25	48	100	240	3600
1½	5*	15*	30*†	50	120†	400	...
2*†	6*†	16	32	60*†	150	600	..

41 A 7154 C. **CA Series.** All speeds in table above available. —**Specify Speed. 1-9**..........**Ea.** 13.76 **10-24**..........**Ea.** 12.3

41 A 7152 C. **SM Series.** *Available only in speeds indicated by asterisk in table above.*—**Specify. 1-9**......**Ea.** 13.51 **10-24**......**Ea.** 12.1

PC-SM Positive Clutch Series. Basic SM motor as described above with positive clutch and instantaneous brake. Clutch will start output shaft within 20 milliseconds and brake will stop output shaft within 1/5° at 1 rpm or within 12° at 60 rpm; other speeds proportional. Shpg. wt. 1¼ lbs. *Available only in speeds indicated by asterisk* (*) *in table above*—**Specify Speed.**
41 A 7153 C. 1-9.........**Each** 19.65 **10-24**.........**Each** 17.6



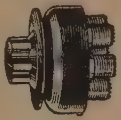
EA Series. Synchronous motor, with 15 inch-ounce rating at 1 r/min. Open frame shaded pole. Completely accurate, cool-running timing motor with clockwise rotation Case measures 1⅝x2⅝x3 5/16". 3/16x1" output shaft, except ‡3/32x1". Wt., 1¼ lbs.

Stock No.	rpm	EACH	
		1-9	10-24
41 A 7155 C	1-120†	10.29	9.25
41 A 7156	3600‡	7.62	6.86

Available only in speeds indicated by dagger (†) *in table above*—**Specify**

Coaxial Relays and Relay Cleaning Tools

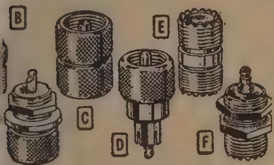
ɔW-KEY MANUAL COAXIAL ENNA SWITCHES



ɛries. For manual hing of antenna .. Provide outstand- ꝲF characteristics. contacts are 3/16″ ter in shielded RF . All are rated at 1 rith antenna impedance of 50 ohms. ꝛ is less than 1.05:1 at 150 MHz. on is greater than 50 dB at 500 MHz dB at 30 MHz. Silver UHF antenna ctors. Require 29/64″ mounting hole and ɔle for key. *In listings below indi- unit has transfer-crossover switch. lete with mounting nut, dial plate ıob. Rugged black anodized finish. 3″ ter, 1⅛″ depth. Av. shpg. wt., 5 oz.

5900. 78-0204. SPDT..........14.00
5901. 78-0304. SP3T..........14.45
5902. 78-0604. SP6T..........15.65
5904. 78-0904. *T-C..........16.65

V-KEY COAXIAL CONNECTORS



A 5905. C-201. Male UHF panel type. ıgle ⅝″ hole mounting. 1 oz.....1.07

A 5907. A-210. Female UHF to male ono type connector. Wt., 1 oz...1.24

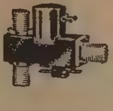
A 5946. A-F2. Double male UHF king type connector. Wt., 1 oz......76

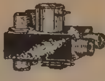
A 5908. A-211. Male UHF to male ono type connector. Wt., 1 oz...1.32

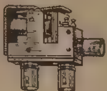
A 5906. A-202. Double female UHF ɔe connector. Wt., 1 oz...........82

A 5903. C-60P. Female UHF type. ıgle ⅝″ hole panel mounting. 1 oz. .69

DOW-KEY COAXIAL ANTENNA RELAYS


60


260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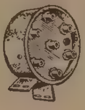
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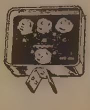
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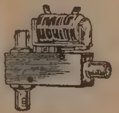

77

60 Series. Heavy-duty SPDT 50-ohm coaxial relays. Handle 1 kW. VSWR less than 1.15:1, 0-500 MHz. Types with * have patented automatic receiver protecting connector for greater than 100 dB isolation between receiver and transmitter lines, from 0-500 MHz. Types ending in 2 include external DPDT contacts for switching auxiliary circuits 5 A @ 110 VAC. UHF conn. 2¾x3¾x1⅛″. Av. wt., 10 oz.

Stock No.	Mfr's Type	Coil Volts	EACH	
			1-4	5-9
41 A 6114	60-2204	12 DC	14.85	13.50
41 A 6115	60-2604	115 AC	14.85	13.50
41 A 5953	60-2228*	12 DC	16.35	14.85
41 A 5955	60-2628*	115 AC	16.35	14.85
41 A 6118	60-222842*	12 DC	18.00	16.35
41 A 6119	60-262842*	115 AC	18.00	16.35
41 A 6116	60-220442	12 DC	16.50	15.00
41 A 6117	60-260442	115 AC	16.50	15.00

260. DPDT coaxial unit for switching two lines simultaneously. Frequency range is 0-500 MHz; power rating, 1 kW. VSWR, less than 1.15:1 from 0 to 500 MHz; isolation greater than 30 dB at 500 MHz; loss is less than 0.03 dB at 30 MHz. Long life—over 1 million operations. 50 ohms. 2¾x3¾x1¾″. UHF connector. Shpg. wt., 12 oz.

41 A 6149	260-2604	115 AC	24.75	22.50

260B. Similar to Type 260, above, but internally connected in the de-energized position. UHF conn. Shpg. wt., 12 oz.

41 A 5956	260B-2604	115 AC	23.90	21.75

61. High-performance SPDT type switch. Range, 0-1000 MHz. VSWR, 1.1:1 at 400 MHz. Crosstalk, —40 dB at 400 MHz. Capacity, 100 watts. Plated per MIL-QQS-365, QQP-416. Life, over 1 million operations. 1¼x⅝x19/32″. BNC conn. 6 oz.

41 A 6148	61-2302	28 DC	28.95	26.30

71. SP6T weatherproof type for remote switching of RF sources. Common connector may be switched directly to any one of six positions. Range, 0-500 MHz; rating, 1 kW; VSWR, 1.1:1 at 100 MHz; isolation, 40 dB at 100 MHz; life, greater than 1 million operations. 50 ohms impedance. 5¾″ dia., 2¾″ deep. UHF conn. 3 lbs.

Stock No.	Mfr's Type	Coil Volts	EACH	
			1-4	5-9
41 A 5957	71-260402	115 AC	61.85	56.25
41 A 5958	71-290402	24 AC	61.85	56.25

72. SP3T multi-position switch; weatherproof type. Same high-quality features as Type 71 switch listed above, except has only three positions. Supplied complete with mounting bracket that accommodates two standard TV mounting straps for quick, easy installation on antenna mast. UHF conn. Size, 4x3½x3⅝″. Shpg. wt., 1½ lbs.

41 A 5960	72-260402	115 AC	31.35	28.50
41 A 5965	72-290402	24 AC	31.35	28.50
41 A 5967	72-220402	12 DC	31.35	28.50

77 Series. Miniature 50-ohm SPDT types with Type BNC connectors. Frequency range, DC to 1000 MHz; power rating up to 250 watts; VSWR, less than 1.1:1 at 500 MHz; isolation, greater than 30 dB at 500 MHz; insertion loss, less than .03 dB at 500 MHz; life, over 1 million operations. Models with 32 in Type No. have SPDT auxiliary switches rated 5 A @ 110 VAC resistive. 2⅜x2⅛x11/16″ with connector. Wt., 5 oz.

Stock No.	Mfr's Type	Coil Volts	EACH	
			1-9	10-24
41 A 5910	77-220202	12 DC	11.50	10.50
41 A 5911	77-230202	28 DC	11.50	10.50
41 A 5914	77-220232	12 DC	12.75	11.60
41 A 5919	77-230232	28 DC	12.75	11.60

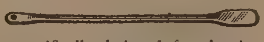
JONARD RELAY TOOLS AND SERVICE KITS

ꞆOCKET ƆNTACT ꝚNISHERS

ɑct tools for cleaning and burnishing relay contacts. Replace- ꞩteel blades. Leaves no residue. Chrome-plated barrel with t clip, aluminum chuck. Plastic cap permits use with live ɔts. Size, ⅜x5½″. With blades. Shpg. wt., 5 oz.

7355. P-4 Burnisher. With 12 RB4 (¼x1¼″ blades)......3.90
7356. P-6 Burnisher. With 12 RB6 (3/16x1¾″ blades.).....3.90
7357. RB4 Replacement Blades. 2 oz........Pkg. of 25 for 3.75
7358. RB6 Replacement Blades. 2 oz.... ...Pkg. of 25 for 3.75

ƊIAMOND-FACED ꝚELAY CLEANERS



ɔnd-impregnated spatulas specifically designed for cleaning ɔontacts. Require only a gentle, even pressure to do a thorough ɪng job—contact gap is left unchanged. Types 200: .019″ diamond 300: .017″. Have two diamond faces. Type 400 has .011″ dia- grain. Type 234 is set of one each of the three types, in plastic 6″ long. Shpg. wt., 2 oz.

ɔk No.	Mfr's Type	Description	EACH
ʌ 7328	D 200	For industrial relays	4.95
ʌ 7329	D 300	For intermediate relays	4.95
ʌ 7330	D 400	For sensitive relays	4.95
ʌ 7285	K 234	Set of one ea.: 200, 300, 400	14.85

ΞLAY CONTACT THICKNESS GAUGE

T-255. Extremely useful gauge accurately ures thickness of contact spacing on relays witches. Has 9 swing-out blades that meas- ıickness from .009″ to .026″. Complete with g, ½″ wide case to protect blades when not in use. Wt., 5 oz.

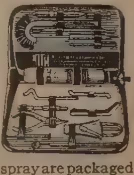
5939..2.24

KR-6 COMPACT 8-PIECE RELAY SERVICE TOOL KIT

Handy relay service tool kit designed to fit easily in the serviceman's pocket or tool box. Ideal for "in-plant" and emergency service calls. Includes all the major tools needed to accurately adjust, calibrate and service relays, contacts, and many other electro-mechanical devices. All tools are precision-made of the finest quality carbon steel. Heavily insulated dielectric tools permit adjusting or repairing even high-voltage equipment without the necessity of costly and time-consuming power shutdowns. Kit includes: spring adjuster; armature arm and stop benders; duckbill pliers; contact burnisher; 0-50 gram relay spring-tension gauge; fine point tweezer; swivel head screwdriver. All tools are in handy zippered leather carrying case with special holders for each tool. Shpg. wt., 2 lbs.

41 A 7351..22.00

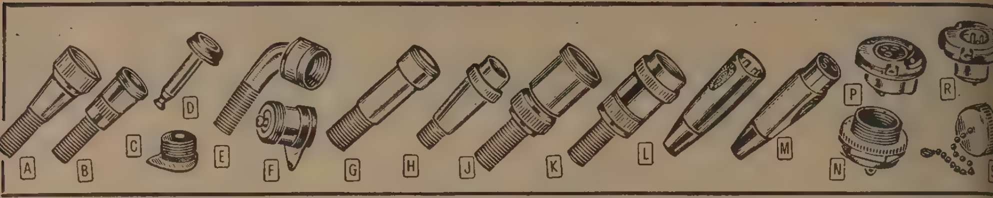
K-55 MASTER 15-PIECE RELAY SERVICE TOOL KIT



Precision-made, professionally designed tool outfit contains everything needed for full adjustment and maintenance of relays, contactors, switches, other electro-mechanical devices. Kit includes: two spring adjusters (Types SA-7, SA-17); duckbill pliers; service inspection mirror; armature arm bender; "PENFILE" contact burnisher; 0-50 gram relay-spring tension gauge; screwdriver; 4-in-one tool; back-stop bender; angle thickness gauge; tweezer; selector switch brush; pkg. of 12 replacement blades for contact burnisher; "Kontact 60" spray. All tools and spray are packaged in deluxe zippered leather carrying case for complete protection. Shpg. wt., 3½ lbs.

41 A 7350..37.60

Amphenol Microphone and RF Cable Connectors



MICROPHONE CONNECTORS

Most microphones listed in this catalog are supplied less connector. Choose from this complete selection of Amphenol connectors—you'll find one to meet any application. Precision construction assures connections free from noise, leaks or shorts. Cable plugs are equipped w spring-type cord protectors. When splicing 2 cords, use one 75-MC and one 75-MC1M connector for a strong, reliable connection.

SERIES 75 SINGLE-BUTTON CONTACT TYPES

Standard connectors ⅝", 27 threads; *⅜" mounting holes. †Indicates miniature connectors that are approximately half the size and weight of standard counterparts with same specifications. Durable bright chrome finish. Av. shpg. wt., 3 oz.

Stock No.	Type	Fig.	Description	EA.
47 A 1958	75-MC1F	A	Cable plug	.64
47 A 1955	75-MC1M	B	Cable plug	.46
47 A 1965	*75-PC1M	C	Chassis receptacle, non-shorting	.41
47 A 1962	75-MC1P	D	Phone plug adapter	.52
47 A 1959	75-MC1FA	E	90° angle cable jack	1.31
47 A 1967	*75-CL-PC1M	F	Chassis receptacle, closed circuit	.67
47 A 2660	†75-3	F	Locknut receptacle	.50

SERIES 80 SINGLE AND DOUBLE-PIN CONTACT TYPES

For shielded cables, single and two-conductor coax, etc. Center contacts are pin and socket type. *Single-contact type. †Polarized, double-contact. Mount in ⅝" hole with max. panel thickness of 11/32". Durable bright chrome finish. Av. shpg. wt., 3 oz.

47 A 2084	*80-C	N	Female chassis receptacle	.54
47 A 2081	*80-M	H	Male cable plug	.67
47 A 2082	†80-MC2F	G	Female cable jack	.71
47 A 2664	†80-MC2F1	H	Female cable plug	.75
47 A 2083	†80-MC2M	H	Male cable plug	.69
47 A 2665	†80-MC2M1	G	Male cable jack	.65
47 A 2085	†80-PC2F	N	Female chassis receptacle	.60
47 A 2666	†80-PC2M	N	Male chassis receptacle	.57

S **Type 75-CCC1 Cap and Chain.** Seals open chassis units against dirt and dust. Chain has eye for securing to panel. Used with both series 75 and 80 receptacles. Shpg. wt., 3 oz.
47 A 0381 .... .45

SERIES 91 3 AND 4-CONTACT TYPES

For portable equipment. Polarized. Clamps eliminate stress on solde connections. *3-contact type. †4-contact. Panel ⅛" thick, max. Re tacles mount in 27/32" hole. Av. shpg. wt., 3 oz.

Stock No.	Type	Fig.	Description	EAC
47 A 1970	*91-MC3F	J	Female cable jack	1.0
47 A 2667	*91-MC3F1	K	Female cable plug	1.1
47 A 1971	*91-MC3M	K	Male cable plug	1.0
47 A 2668	*91-MC3M1	J	Male cable jack	.9
47 A 1972	*91-PC3F	N	Female chassis receptacle	.7
47 A 2669	*91-PC3M	N	Male chassis receptacle	1.1
47 A 1977	†91-MC4F	J	Female cable jack	1.1
47 A 2670	†91-MC4F1	K	Female cable plug	1.1
47 A 1976	†91-MC4M	K	Male cable plug	1.0
47 A 2672	†91-MC4M1	J	Male cable jack	.9
47 A 1978	†91-PC4F	N	Female chassis receptacle	.7
47 A 2673	†91-PC4M	N	Male chassis receptacle	.9

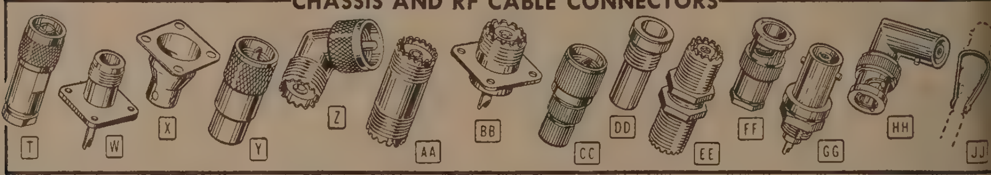
S **Type 91-CCC3 Cap and Chain.** Protects chassis jacks from du Used for series 91 microphone connectors. Shpg. wt., 3 oz.
47 A 2674. ....

SERIES 91 "QUIK" 3 AND 4-CONTACT TYPES

Push together; released by slight pressure on lock button. Gold-Pla (over silver) bronze contacts. Incorrect insertions are impossible beca connectors are polarized. Satin nickel-plated, zinc-alloy shells. *3-co tact type. †4-contact type. Av. shpg. wt., 3 oz.

47 A 2065	*91-853	L	Male cable plug	1.7
47 A 2066	*91-854	M	Female cable plug	2.2
47 A 2067	*91-855	R	Male chassis receptacle	1.3
47 A 2068	*91-856	P	Female chassis receptacle	3.1
47 A 2069	†91-857	L	Male cable plug	1.8
47 A 2070	†91-858	M	Female cable plug	2.5
47 A 2071	†91-859	R	Male chassis receptacle	1.4
47 A 2072	†91-860	P	Female chassis receptacle	3.3

CHASSIS AND RF CABLE CONNECTORS



Series 31 BNC Coaxial Connectors. Small, weatherproof connector with bayonet coupling. Low-voltage, single contact. *For 50-ohm RG-55/U and RG-58/U cables. †For 70-ohm RG-59/U, RG-62/U and RG-71/U. Plugs mate with 31-003 or jacks. *Tarnish-proof finish available on Stock Nos. with Suffix "C." Specify -1050 after Mfr's Type No.* Av. shpg. wt., 3 oz.

Stock No.	Military No.	Mfr's Type	Fig.	Description	EA.
47 A 2512 C	UG-88/U	*31-002	FF	Plug	.70
47 A 2513 C	UG-88B/U	*31-018	FF	Plug	.81
47 A 2516 C	UG-88CU	*31-202	FF	Plug	.75
47 A 0393	UG-89/U	*31-005	GG	Receptacle	1.09
47 A 2519 C	UG-260/U	†31-012	FF	Plug	.75
47 A 2520 C	UG-260A/U	†31-021	FF	Plug	.83
47 A 0397	UG-261/U	†31-015	GG	Jack	1.23
47 A 0395	UG-262/U	†31-011	.....	Panel Jack	1.36
47 A 2508 C	UG-274/U	31-008	.....	"T" Adapter	2.29
47 A 2509 C	UG-290/U	*31-003	.....	Receptacle	.79
47 A 2510 C	UG-290A/U	31-203	.....	Receptacle	.85
47 A 0399	UG-291/U	*31-001	.....	Panel Jack	1.21
47 A 0394	UG-306/U	31-009	HH	Adapter, Right-Angle	2.06
47 A 2486	UG-491A/U	31-218	.....	Male Adapter	2.36
47 A 2500 C	UG-625/U	5575	GG	Receptacle	.72
47 A 2502 C	UG-657/U	31-102	GG	Receptacle	.72
47 A 2506 C	UG-1094/U	31-221	GG	Receptacle	.70
47 A 2441 C	....	31-759	JJ	Shield Grounding Lug	.15

Series 82 N Coaxial Connectors. Low-voltage. 70 ohms. *50 ohms. 3 oz

Stock No.	Military No.	Mfr's Type	Fig.	Description	EA.
47 A 0313	UG-21B/U	82-61	T	Plug	1.32
47 A 2603	UG-57B/U	*82-100	.....	Adapter, Straight Male	2.15
47 A 0312	UG-58/U	82-24	W	Receptacle	1.00
47 A 0529	UG-58AU	*82-97	W	Receptacle	1.02
47 A 2116	UG-536/U	34000	T	Plug	1.93

Series 83 UHF Coaxial Connectors. Small single contact. Widely us for RF applications. All exposed metal is silver plated for superior pe formance. Polystyrene insulation. †Mica-filled. *Tarnish-proof fini available on Stock Nos. with Suffix "C". Specify -1050 after Mfr's Ty* No. Av. shpg. wt., 3 oz.

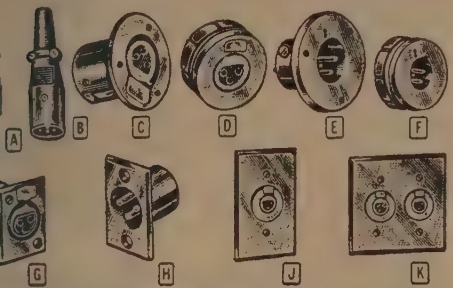
Stock No.	Military No.	Mfr's Type	Fig.	Description	E
47 A 0357	UG-106/U M-360, 49193	83-1H	X	Hood	[illegible]
47 A 2450	UG-111/U	83-750	T	Plug	.9
47 A 2521 C	UG-175/U	83-185	DD	Adapter, Reducing	[illegible]
47 A 2530 C	UG-176/U	83-168	...	Adapter, Reducing	[illegible]
47 A 0351	UG-177/U	83-765	X	Hook	[illegible]
47 A 0373	UG-203/U	83-776	Y	Plug	1.
47 A 2531 C	UG-363/U	83-1F	EE	Adapter, Bulkhead	2.6
47 A 2534 C	UG-646/U	83-1AP	Z	Adapter, Rt. Angle	1.6
47 A 2545 C	M-358, 49199	83-1T	...	"T" adapter	2.9
47 A 2452	M-359A	83-58	...	Adapter, Angle	2.0
47 A 2546 C	PL-258, 49191	83-1J	AA	Straight adapter	1.1
47 A 2437 C	PL-259, 49190	83-1SP	Y	For RG/U8, 9, 10, 11, 12, 13, 63, 65	[illegible]
47 A 2439 C	SO-239, 49194	83-1R	BB	Recept. chassis type	[illegible]
47 A 2454	PL-259A, 49195	83-756	T	Plug	1.4
47 A 2438 C	PL-259A	†83-1SPN	Y	Plug	1.0
47 A 2455	SO-239	*83-1RTY	BB	Receptacle	.8
47 A 2453	SO-239A	83-798	BB	Receptacle	1.3
47 A 2440 C	PL-259, 49190	83-822	T	Plug	[illegible]
47 A 0361	UG/102/U	83-22SP	...	Plug	1.4
47 A 0362	UG-103/U	83-22R	...	Receptacle	1.

Solderless Type UHF Plug Connectors. Av. shpg. wt., 3 oz.

47 A 0509	....	83-850	CC	Plug for RG/U 11	3.
47 A 0510	....	83-851	CC	Plug for RG/U 8, 9, 10, 11, 12, 13, 63, 65	2.2

Audio Connectors and Adapter Kit

ITT-CANNON XLR AUDIO CONNECTORS



o connectors with clamp and resilient socket insulator. Minimize anical interference and reduce noise. Feature satin-nickel finish, ral cable clamp, neoprene cable relief and push-action latchlock. number in Type column indicates number of contacts. -2G in Type ndicates 2 gang. 3-contact types rated at 15 amps; 4-contact types at 10 amps. *Wall-type receptacles; †panel-type receptacles. cates steel shell, others are die-cast zinc. Av. shpg. wt., 4 oz.

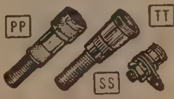
STRAIGHT CORD PLUGS

k No.	Mfr's Type	Fig.	Description	1-9 EA.	10-49 EA.
0790	XLR-3-11C	A	Female (socket insert)	1.57	1.44
1212	XLR-4-11C	A	Female (socket insert)	1.99	1.82
0983	XLR-3-11SC‡	A	Female (socket insert)	4.99	4.58
0984	XLR-4-11SC‡	A	Female (socket insert)	5.08	4.66
0791	XLR-3-12C	B	Male (pin insert)	1.36	1.25
1213	XLR-4-12C	B	Male (pin insert)	1.45	1.33
0985	XLR-3-12SC‡	B	Male (pin insert)	3.98	3.65
0986	XLR-4-12SC‡	B	Male (pin insert)	4.10	3.76

WALL AND PANEL RECEPTACLES

k No.	Mfr's Type	Fig.	Description	1-9 EA.	10-49 EA.
1214	XLR-3-13†	C	Female (socket insert)	2.25	2.06
1215	XLR-4-13†	C	Female (socket insert)	2.33	2.14
1216	XLR-3-13N†	D	Female (socket insert)	3.05	2.80
1217	XLR-4-13N†	D	Female (socket insert)	3.15	2.89
1218	XLR-3-14*	E	Male (pin insert)	1.03	.94
1219	XLR-4-14*	E	Male (pin insert)	1.06	.97
1223	XLR-3-14N†	F	Male (pin insert)	2.48	2.28
1224	XLR-4-14N†	F	Male (pin insert)	2.68	2.46
0792	XLR-3-31*	G	Female (socket insert)	2.35	2.15
1225	XLR-4-31*	G	Female (socket insert)	2.41	2.21
0793	XLR-3-32*	H	Male (pin insert)	1.33	1.22
1226	XLR-4-32*	H	Male (pin insert)	1.75	1.61
0987	XLR-3-35*	J	Female (socket insert)	5.77	5.29
0988	XLR-3-35-2G*	K	Female (socket insert)	10.61	9.72

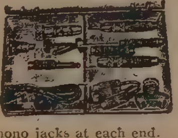
SWITCHCRAFT MINI-CON MIKE CONNECTORS



t one-half size of standard mike con- rs. For use with single-conductor ded cables to 3/16" O.D. Nickel-plated bodies. Coupling ring on 5501F re- able for quick change of female to male Cable-braid spring clamped to body ollow set screw. 5501MP mounts in ole. Av. shpg. wt., 2 oz.

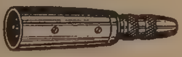
ock No.	Type	Fig.	Desc.	EACH
A 4920	5501F	PP	Female	.45
A 4925	5501M	SS	Male	.36
A 4927	5501MP	TT	Male	.33

SWITCHCRAFT HANDY ADAPTER KIT

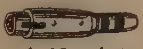


pe 331A. 11 audio adapters, 1 cable plastic box. One each: 25AF25, 36" elded cable with phono plug each l; 25Y mike connector Y-adapter;)F1, Fig JJ at right; 332A, Fig. M right; 334A, Fig. N at right; 336A, . Y at right; 336B, phone jack input phono jack output; 345, phono jack ut to phone plug output; Two each: pe 44 adapter, make mike input to one plug output; Type 349 coupler, phono jacks at each end.
A 4906. Shpg. wt., 1 lb. 10.56

SWITCHCRAFT AUDIO CONNECTOR

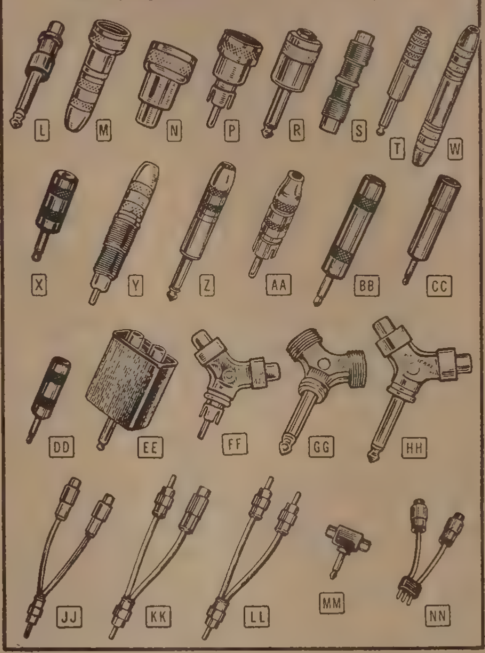


e 384. Adapts standard 2-conductor e plug (Switchcraft Nos. 240 and 250) to oment using a 3-contact audio receptacle. chcraft Nos. A3F, C3F, D3F; Cannon -3-11C, XLR-3-13C, etc.). Has elec- ly integral ground terminal, "captive design" insert screw. Wt., 4 oz.
1490 . . . . .2.46



e 383. Similar to above. Has same quality res, but uses a three-pin audio receptacle chcraft Nos. A3M, B3M, C3M, D3M and on Nos. XLR-3-12C, XLR-3-14, etc.). Adapts standard 2-conductor e plug (Switchcraft Nos. 240 and 250) to components that do not mating connectors—mixers, microphones, amplifiers, etc.
1733. Shpg. wt., 4 oz. 2.85

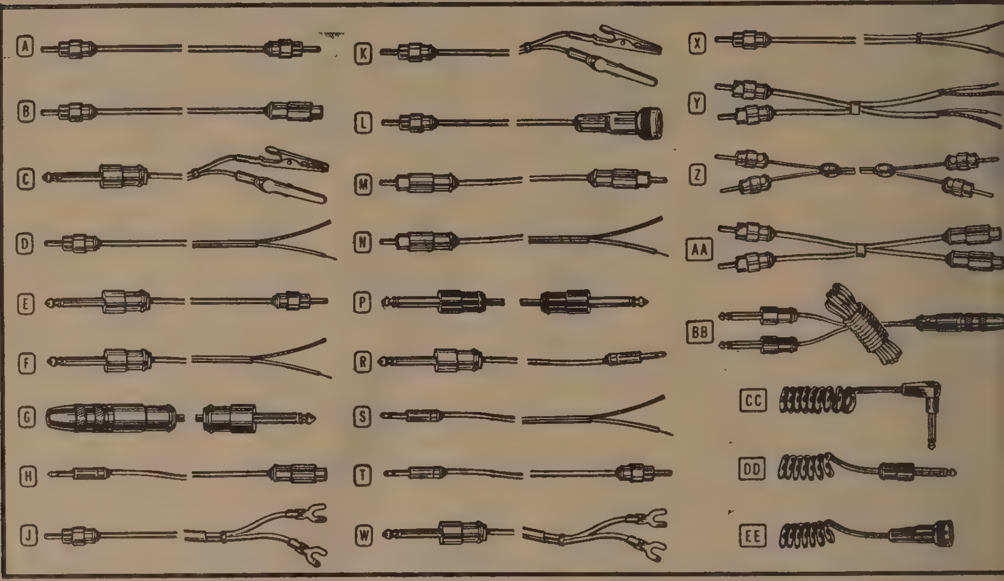
SWITCHCRAFT ADAPTER CONNECTORS



Provide quick, sure interconnection of audio equipment whose existing connectors do not mate. Positive mating contacts prevent resistive line losses. All are shielded to assure reduction of hum. Types 332A, 334A, 338B may be used with either male or female types—coupling ring is removable. Nos. 369, 374, 375, 376, 377 have shielded, nickel-plated brass handles. No. 378 for two separate earphones. Av. wt., 6 oz.

Stock No.	Type	Fig.	Description	EA.
47 A 0382	345A	L	Phone plug out; phono jack in.	.87
47 A 1768	332A	M	2-cond. phono jack input to female or male mike output; main body ½".	1.20
47 A 1769	334A	N	Phono jack input to female microphone connector output.	.99
47 A 1795	338B	P	Phono plug to female mike connector.	.87
47 A 0940	364A	R	2-cond. "tini-jack" input; standard phone plug out.	1.05
47 A 1774	349A	S	Phono jack coupler mates with phono plug at each end; gray plastic.	.72
47 A 1779	369	T	Std. 2-cond. phone plug to 2-cond. short extension jack (used on late models Revere and Wollensak recorders).	1.41
47 A 0938	361	W	2-cond. phone jack coupler mates with phone plug at each end.	1.56
47 A 1799	377	X	"Micro-jax" input to 2-cond. "tini plug"	1.08
47 A 1772	336A	Y	2-conductor phone jack input to phono plug output; main body ½".	1.20
47 A 1618	352	Z	3-cond. phone jack to 2-cond. phone plug output.	1.41
47 A 1619	365	AA	2-cond. "tini jack" input to standard phono plug output.	1.05
47 A 1789	374	BB	Phone jack to 2-cond. "tini-plug".	1.20
47 A 1788	370	CC	Phono jack to 2-cond. "tini-plug".	.81
47 A 1797	375	CC	Phono jack to 2-cond. "tini plug".	1.08
47 A 1798	376	DD	Tini-jax input to 2-cond. micro-plug.	1.08
47 A 1721	353	EE	Adapter for using 2 stereo headsets from single 3-cond. jack; 3-cond. phone plug to two 3-cond. phone jacks.	2.91
47 A 0939	340	EE	2 std. phone jack inputs paralleled to 2-cond. phone plug output	2.46
47 A 1764	330F	FF	2 phono jacks connected in parallel to standard phono plug.	1.23
47 A 1994	330M	GG	Y-adapter, 2 male mike connectors to standard 2-cond. phone plug.	1.41
47 A 1229	330PJ	HH	Y-adapter; standard phone plug to 2 phono jacks.	1.41
47 A 1686	330F1	JJ	Flexible Y-connector; 2 phono jacks to std. phono plug. Shielded. 4".	1.88
47 A 1699	330F2	KK	Same as above, but phono plug and phono jack to phono plug.	1.88
47 A 1722	330F3	LL	Same as above two types, but 1 phono plug to two phono plugs	1.88
47 A 1732	378	MM	"Tini-Tee" Adapter. 2-cond. "Tini-Plug" input to two 2-cond. "Tini-Jax" outputs.	1.41
47 A 1734	330B	NN	Adapts Lear Jet Model HSA-900 tape recorder to RCA, or units with a 3 contact in-line socket assembly.	1.41

Switchcraft Audio Connectors and Molded Cables



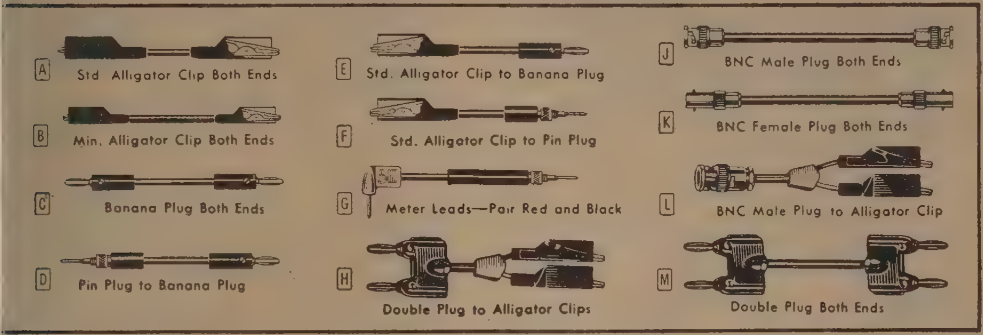
AUDIO CONNECTORS AND MOLDED CABLE ASSEMBLIES

Feature highest quality wire, soldered connections. Plugs are molded directly to various cable combinations . . ensures protection against moisture, minimizes noise, virtually eliminates short-circuits, and provides positive electrical connections. Built-in cable clamps support cable and eliminate strain on plugs. Plugs and jacks are molded of unbreakable Tenite for long-life and rugged use. In table below, standard phone plugs have ¼" diameter sleeve; handles designed to "mate" with jacks even when jacks are recessed below panel surface. Tiny plugs (Series 40DF, DK, and DN) are ⅓ standard size to be used with late-model record equipment, pocket radios, etc. Series 25FF, FK, and FN are spec stereo cable assemblies providing two completely isolated channe with color-coded insulated cables inside a chrome gray plastic jack separate plugs for easy connections regardless of jack spacing. Ty 05FH81 (Fig. BB) adapts 3-cond. plugs on stereo headphones to 2 sep rate 2-cond. jacks used on most stereo recorders. Wires are shielded unshielded as indicated. Av. shpg. wt., 6 oz.

Stock No.	Mfr's Type	Fig.	Feet	Description	EACH
47 A 1509	25AC25	A	1½	Straight Phono Plug at each end of Gray Shielded Cable.	.92
47 A 1510	25AF25	A	3		1.04
47 A 1512	25AK25	A	6		1.32
47 A 1538	25AN25	A	10		1.84
47 A 1541	25AF82	B	3	Straight Phono Plug to Phono Extension Jack; Gray Shielded Cable.	1.20
47 A 1542	25AK82	B	6		1.60
47 A 1543	25AN82	B	10		1.32
47 A 1578	05CK86	C	6	Straight Phone Plug to Alligator Clips; Gray Parallel Cable; Unshielded	1.72
47 A 1544	05CN86	C	10		2.20
47 A 1547	05CT86	C	20		2.80
47 A 1548	25AF84	D	3	Straight Phono Plug to Stripped and Tinned Ends; Gray Shielded Cable.	.80
47 A 1549	25AK84	D	6		1.00
47 A 1550	25AN84	D	10		1.48
47 A 1551	05AK25	E	6	Straight Phone Plug to Straight Phono Plug; Gray Shielded Cable.	1.80
47 A 1552	05AN25	E	10		2.52
47 A 1570	05AR25	E	15		2.80
47 A 1600	05AK84	F	6	Straight Phone Plug to Stripped and Tinned Ends; Gray Shielded Cable.	1.60
47 A 1601	05AN84	F	10		2.08
47 A 1602	05AR84	F	15		2.52
47 A 1596	10BK81	G	6	Straight 3-Cond. Phone Plug to Straight 3-Cond. Extension Jack. Gray Shielded Cable.	4.56
47 A 1597	10BN81	G	10		5.68
47 A 1598	10BU81	G	15		8.36
47 A 1605	05AK80	G	6	Straight 2-Cond. Phone Plug to Straight 2-Cond. Extension Jack. Gray Shielded Cable.	2.40
47 A 1615	05AN80	G	10		3.28
47 A 1620	05AR80	G	15		3.76
47 A 1622	40DF82	H	3	Straight Tiny Plug to Phone Extension Jack; 2-Cond. Shielded Cable.	1.56
47 A 1623	40DK82	H	6		2.32
47 A 1624	40DN82	H	10		2.68
47 A 1626	25CN85	J	10	Straight Phono Plug to Spade Lugs; Gray Parallel Cable; Unshielded.	1.32
47 A 1726	25CT85	J	20		2.00
47 A 2443	25CK86	K	6	Straight Phono Plug to Alligator Clips; Gray Parallel Cable; Unshielded.	1.60
47 A 1627	25CN86	K	10		2.08
47 A 1628	25CT86	K	25		2.40
47 A 1629	25AK87	L	6	Straight Phono Plug to Microphone Conn. 2501F; Gray Shielded Cable.	2.28
47 A 1631	26AR26	M	15	Straight Phono Plug with Long Handle on Each End; Gray Shielded Cable.	2.40
47 A 1632	25AR84	N	15	Straight Phono Plug to Stripped and Tinned Ends; Gray Shielded Cable.	2.16
47 A 1638	05AK05	P	6	Straight 2-Cond. Phone Plug at Each End; Gray Shielded Cable.	2.40
47 A 1633	05AN05	P	10		3.28
47 A 1727	05AU05	P	25		4.36
47 A 1593	10BK10	P	6	Straight 3-Cond. Phone Plug at Each End; Gray Shielded Cable	4.56
47 A 1594	10BN10	P	10		5.68
47 A 1595	10BU10	P	25		8.36
47 A 1634	40DF05	R	3	Straight Tiny Plug to Straight Phone Plug; 2-Cond Shielded Cable.	2.1
47 A 1637	40DK05	R	6		2.5
47 A 1639	40DN05	R	10		2.8
47 A 1645	40DF84	S	3	Straight Tiny Plug to Stripped and Tinned Ends; 2-Cond. Shielded Cable.	1.6
47 A 1646	40DK84	S	6		1.8
47 A 1647	40DN84	S	10		2.3
47 A 1648	40DF25	T	3	Straight Tiny Plug to Straight Phono Plug; 2-Cond. Shielded Cable.	1.9
47 A 1655	40DK25	T	6		2.3
47 A 1675	40DN25	T	10		2.6
47 A 1683	05CT85	W	20	Straight Phone Plug to Spade Lugs; Gray Parallel Cable, Unshielded.	2.1
47 A 1685	25CN84	X	10	Straight Phono Plug to Stripped and Tinned Ends; Parallel Cable; Unshielded.	1.2
47 A 1728	25CT84	X	20		2.1
47 A 1497	25FF84	Y	3	Two Straight Phono Plugs on One End to Stripped and Tinned Leads; Gray Shielded Stereo Cable.	2.6
47 A 1498	25FK84	Y	6		3.0
47 A 1499	25FN84	Y	10		3.5
47 A 1494	25FF25	Z	3	Two Straight Phono Plugs at Each End; Gray Shielded Stereo Cable.	3.0
47 A 1495	25FK25	Z	6		3.5
47 A 1496	25FN25	Z	10		4.2
47 A 1723	25FF82	AA	3	Two Straight Phono Plugs on 1 End to Two Straight Phono Exten. Jacks; Gray Shielded Stereo Cable.	2.7
47 A 1724	25FK82	AA	6		3.2
47 A 1725	25FN82	AA	10		3.8
47 A 1531	05FH81	BB	4	Two 2-Cond. Phone Plugs on One End to 3-Cond. Phone Extension Jack. Shielded Gray Stereo Cable. Color-Coded.	4.1
47 A 2445	25FH81	BB	4		3.3
47 A 1505	15LH84	CC	4	Right Angle Phone Plug to Stripped and Tinned Ends; Shielded Coiled Cord.	2.4
47 A 1504	05LH84	DD	4	Straight Phone Plug to Stripped and Tinned Ends; Shielded Coiled Cord.	2.4
47 A 1506	87LH84	EE	4	Type 2501F Connector to Stripped and Tinned Ends; Shielded Coiled Cord.	2.4
47 A 1532	05LP05	DD/DD	12	Straight Phone Plug at Each End. Shielded Coiled Cord.	4.9
47 A 1535	05LT05	DD/DD	20		6.9
47 A 1533	05LP15	DD/CC	12	Straight Phone Plug to Right Angle Phone Plug; Shielded Coiled Cord.	4.9
47 A 1536	05LT15	DD/CC	20		6.9
47 A 1534	05LP87	DD/EE	12	Straight Phone Plug to Type 2501F Connector; Shielded Coiled Cord.	5.0
47 A 1537	05LT87	DD/EE	20		7.0

H. H. Smith Test Leads, Patchcords and Jumpers

SHIELDED AND UNSHIELDED JUMPER CABLES


A
Std Alligator Clip Both Ends
B
Min. Alligator Clip Both Ends
C
Banana Plug Both Ends
D
Pin Plug to Banana Plug
E
Std. Alligator Clip to Banana Plug
F
Std. Alligator Clip to Pin Plug
G
Meter Leads—Pair Red and Black
H
Double Plug to Alligator Clips
J
BNC Male Plug Both Ends
K
BNC Female Plug Both Ends
L
BNC Male Plug to Alligator Clip
M
Double Plug Both Ends

ıde selection of single test leads for quality control labs, servicemen, . Provide firm mechanical and electrical contact. Feature No. 18 'VG 20,000 volt insulated wire that is extra-flexible and kinkless. ındles are of molded tenite and/or molded bakelite Cadmium-plated steel clips and nickel-plated brass tips for excellent contact and durability. Vinyl plastic boots. Coaxial patch cords use RG-58C/U coaxial cable, except *low-capacity cable. †Pair, red and black #20 wire, 5 kV. §Twisted pair. Av. shpg. wt., 5 oz.

UNSHIELDED JUMPERS

tk. No.	Type	Ft.	Color	Fig.	EA.
A 1851	1596-12-102	1	Red	A	.47
A 1850	1596-12-103	1	Black	A	.47
A 1856	1596-36-102	3	Red	A	.51
A 1855	1596-36-103	3	Black	A	.51
A 1861	1596 60-102	5	Red	A	.55
A 1860	1596 60-103	5	Black	A	.55
A 1863	1597 12-102	1	Red	B	.47
A 1862	1597-12-103	1	Black	B	.47
A 1865	1597-36-102	3	Red	B	.51
A 1864	1597-36-103	3	Black	B	.51

Stk. No.	Type	Ft.	Color	Fig.	EA.
47 A 1867	1597-60-102	5	Red	B	.55
47 A 1866	1597-60 103	5	Black	B	.55
47 A 1901	1863-12-102	1	Red	C	.72
47 A 1874	1863 12-103	1	Black	C	.72
47 A 1904	1863-36-102	3	Red	C	.76
47 A 1903	1863-36 103	3	Black	C	.76
47 A 1909	1863-60-102	5	Red	C	.80
47 A 1908	1863-60-103	5	Black	C	.80
47 A 1923	1865-36-102	3	Red	F	.56
47 A 1922	1865-36-103	3	Black	F	.56

Stk. No.	Type	Ft.	Color	Fig.	EA.
47 A 1925	1865-60-102	5	Red	F	.60
47 A 1924	1865-60-103	5	Black	F	.60
47 A 1961	1868-36-103	3	Black	D	.71
47 A 1930	1866-36-102	3	Red	E	.61
47 A 1929	1866-36-103	3	Black	E	.61
47 A 1935	1866-60-102	5	Red	E	.65
47 A 1931	1866-60-103	5	Black	E	.65
47 A 4371	†625	4	.....	G	1.50
47 A 1793	1531-36§	3	Gray	H	5.55
47 A 1794	1531-60	5	Gray	M	5.75

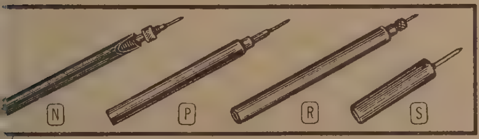
COAXIAL-CABLE SHIELDED PATCH CORDS

tk. No.	Type	Ft.	Color	Fig.	EA.
A 1969	1589-12	1	Black	J	5.35
A 1973	1589-36	3	Black	J	5.55
A 1974	1589 60	5	Black	J	5.75

Stk. No.	Type	Ft.	Color	Fig.	EA.
47 A 1979	1869-36	3	Black	K	6.30
47 A 1980	1869-60	5	Black	K	6.50
47 A 1986	*1537-12	1	Gray	L	5.35

Stk. No.	Type	Ft.	Color	Fig.	EA.
47 A 1987	*1537-36	3	Gray	L	5.55
47 A 1990	*1537-60	5	Gray	L	5.75
47 A 1985	1580-60	5	Black	K	4.75

TEST PRODS



Type 302 Solderless Test Prod. Threaded prod with 4″ long plastic handle. ⅜″ outer diameter. Nickel-plated phone tip. Wire fits rough handle and body of plug, wraps around screw portion—secured knurled collar. Shpg. wt., 4 oz.
A 2110. Red. **47 A 2111.** Black.................... **Each .30**

Type 323 Solderless Fiber Test Prod. Has 4″ bone fiber handle with extra large ¼″ inside diameter for heavy-duty wire. Body is ckel-plated brass. Wire fits through handle and body of plug, wraps ound screw portion. Secured by knurled collar. Wt., 4 oz.
A 2258. Red. **47 A 2259.** Black.................... **Each .30**

Type 319 Heavy-Duty Test Prod. Threaded type with extra-sturdy brass. nickel-plated tip. Molded plastic handle, overall length 5$\frac{3}{16}$″ ng. ⅜″ outer dia. Fits standard phone tip jacks. Shpg. wt., 3 oz.
A 2375. Red. **47 A 2376.** Black.................... **Each .30**

Type 317 Phono Needle Test Prod. Brass, nickel-plated body with steel, nickel-plated phono-type needle. Has removable chuck for placing broken needles. Needle pierces plating or corrosion to insure sitive readings. Plastic handle 4$\frac{13}{16}$″ long overall, ⅜″ O.D. Wt., 4 oz.
A 2373. Red. **47 A 2374.** Black.................... **Each .30**

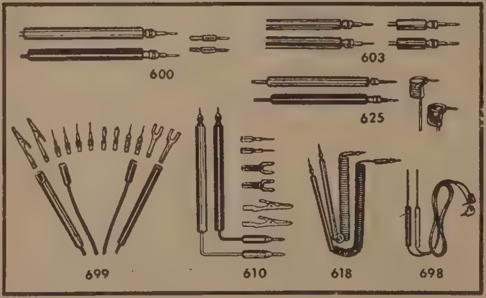
Type 363 Short Tip Jack. Threaded type with brass, nickel-plated phone tip. Tip inserts flush in 4″ long, ⅜″ diameter insulated molded ndle—reduces possibility of shock or grounding. Shpg. wt., 3 oz.
A 2223. Red. **47 A 2224.** Black.................... **Each .25**

ALLIGATOR TEST LEADS

ıdmium-plated steel clips. Have vinyl plastic boots. Have midget clips. Av. shpg. wt., 4 oz.

Stock No.	Type	Wire Lgth.	PER PAIR
47 A 4383	629	12″	92
47 A 4384	657	24″	.96
47 A 4385	716*	12″	.92
47 A 4386	717*	18″	.94
47 A 4387	718*	24″	.96

TEST LEADS AND TEST LEAD KITS



Unless otherwise indicated, leads have 50″ red and black kinkless, rubber-covered wire; butyrate prod handles (one red, one black) 4″ long; ⅜″ outer dia. Brass phone tips, nickel plated.

Type 600. Solderless Phone Tips. Meter end; phone tips on prod.
47 A 4359. Shpg. wt., 4 oz.............................. **Per Pair 1.05**

Type 603 All-Solderless. Red and black plugs, meter end. Solderless phone tips both ends. Shpg. wt., 3 oz.
47 A 4375.. **Per Pair 1.35**

Type 610 Test-Lead Kit. Test leads with solderless phone tips on prods; banana plugs meter end. Tenite handles. Phone tips, Alligator clips, spade lugs that snap-on banana plugs. Shpg. wt., 4 oz.
47 A 4395.. 1.90

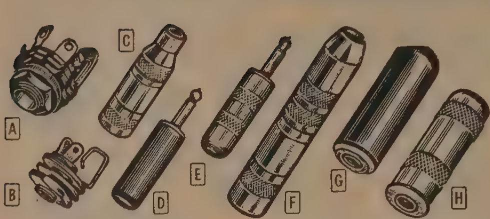
Type 618 Stretch. 12″ coil extends to 6′. Tenite handles. Phone tips both ends. Shpg. wt., 6 oz.
47 A 4398.. **Per Pair 3.00**

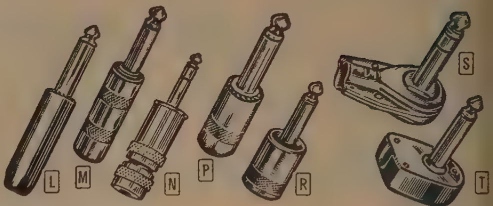
Type 625 Meter Leads. Solderless phone tips. Red and black elbows, right-angle phone tips. Shpg. wt., 3 oz.
47 A 4371.. **Per Pair 1.50**

Type 698 Slim-Jim. 3½″ cadmium-plated steel probes. Vinyl spaghetti insulator. Red and black plastic elbows with phone tips.
47 A 4378. Shpg. wt., 4 oz.............................. **Per Pair 1.35**

Type 699 Universal Kit. 54¾″ leads. 4 phone tips, 2 alligator clips, 2 needle tips, 2 banana plugs, 2 space lugs. In plastic kit.
47 A 4376. Shpg. wt., 5 oz.............................. 3.00

Switchcraft Plugs and Jacks





"LITTEL-JAX" PHONE JACKS

A Take standard ¼" phone plugs, except S-11, which takes S250· S280 and 385 plugs, and C-12B which takes 480 Military-type· "Littel-Plug" ¾" dia., 1¹⁄₁₆" overall, with a ⅜" dia. threaded shank, ¹⁄₁₆" long. L-11 and L-12A have bushing ⅜" long. SCC indicates single closed circuit: OC indicates open circuit. Av. shpg. wt., 3 oz.

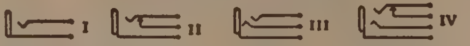
Stock No.	Type	Diag.	Cond.	Circuit	JAN Type	EACH
47 A 4955	11	I	2	OC	....	.30
47 A 4957	C-11	I	2	OC	JJ-034	.45
47 A 4959	L-11	I	2	OC	....	.36
47 A 4961	S-11	I	2	OC	....	.33
47 A 4963	12A	II	2	SCC	....	.33
47 A 4965	C-12A	II	2	SCC	JJ-089	.54
47 A 4967	L-12A	II	2	SCC	....	.39
47 A 4969	12B	III	3	OC	....	.39
47 A 4971	C-12B	III	3	OC	JJ-033	.69
47 A 4973	13B	IV	3	SCC	....	.57

"TINI-JAX" SUBMINIATURE PHONE JACKS

B Extra-small 2-conductor jacks for "Tini-Plugs". ¹¹⁄₁₆" long; fit ¼" hole. OC, open circuit; CC, closed circuit. Av. shpg. wt., 2 oz.

Stock No.	Type	Diag.	Cond.	Circuit	EACH
47 A 4983	41	I	2	OC	.30
47 A 4985	42A	II	2	CC	.33

JACK SCHEMATIC DIAGRAMS



C **Type 125 "Tini-Extension Jax."** Two-conductor; solder lug terminals. Mates with "Tini-Plugs," below. Wt., 2 oz.
47 A 1472...**Each .84**

"TINI-PLUGS" SUBMINIATURE PHONE PLUGS

For use with "Tini-Jax". 1⅝" overall length. 2-conductor. Wt., 2 oz.

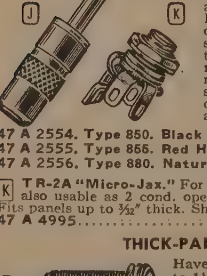
Stock No.	Type	Fig.	Term.	Handle	EACH
47 A 1518	740	D	Screw	Black	.54
47 A 1519	745	D	Screw	Red	.54
47 A 1520	750	D	Solder	Black	.51
47 A 1521	755	D	Solder	Red	.51
47 A 1522	770	E	Screw	Shielded	.72
47 A 1523	780	E	Solder	Shielded	.69

"EXTENSION JAX" CABLE EXTENSION JACKS

Fit standard ¼" plugs. ¹¹⁄₁₆" O.D.; 2⁵⁄₃₂" long. 121 and 131 ½" O.D.; 2½" long. All are open circuit type. Shpg. wt., 3 oz.

Stock No.	Type	Fig.	Cond.	Term.	Handle	EACH
47 A 1473	121	F	2	Solder	Shielded	1.14
47 A 1474	131	F	3	Solder	Shielded	1.41
47 A 1571	80	G	2	Screw	Black	.81
47 A 1718	88	G	2	Solder	Black	.72
47 A 2971	830	G	3	Screw	Black	1.08
47 A 1572	120	H	2	Screw	Shielded	1.08
47 A 1717	1230	H	3	Screw	Shielded	1.38

ULTRAMINIATURE PLUGS AND JACK

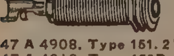


J **TR Series "Micro-Plugs."** Handy ultraminiature plugs and jack featuring same uniformity, dependability and quality construction as famous "Littel-Plugs" and "Tini-Plugs." Extremely small, only 1¹⁄₆₄" long; ¼" O.D.—⅓ the size of standard plugs! Have nylon insulation between tip and sleeve circuits; sleeve terminal is tinned brass. Tip and sleeve are nickel-plated machined brass. All have sleeve circuit cable clamp; accommodate cables to ⁷⁄₆₄" dia. With screw-on anodized aluminum handle. Shpg. wt. 2 oz.

47 A 2554. Type 850. Black Handle......................**Each .48**
47 A 2555. Type 855. Red Handle........................**Each .48**
47 A 2556. Type 880. Natural Handle....................**Each .48**

K **TR-2A "Micro-Jax."** For "Micro-Plugs." 2 cond. sgl. closed circuit; also usable as 2 cond. open circuit. Requires .190" mounting hole. Fits panels up to ³⁄₃₂" thick. Shpg. wt., 2 oz.
47 A 4995...**Each .36**

THICK-PANEL PHONE JACKS



Have extra long bushings for use in panels up to 1¼" thick. Ideal for wall paneling, hi-fi installations, etc. Shielded for microphone use. Require ½" mounting hole. Wt., 2 oz.

47 A 4908. Type 151. 2 Conductor.......................**Each .93**
47 A 4912, Type 152B. 3 Conductor......................**Each 1.02**

"LITTEL-PLUG" PHONE PLUGS

Small-size phone plugs; fit standard ¼" phone jacks, except Types S250 and S280. .206" sleeve for S-11 "Littel Jax" and for Bell & Howell equipment; Type R280 which has short sleeve for Revere recorders. Plugs with solder terminals feature built-in cable clamp; others do not include cable clamp. Metal (shielded) handles are nickel-plated brass; for use in microphone or other input leads as well as outputs requiring continuous shield. All handles are 1¹¹⁄₁₆" long and ½" in diameter. Av. shpg. wt., 4 oz.

Stock No.	Type	Fig.	Cond.	Color	Terminals	EACH
47 A 1553	240	L	2	Black	Screw	.54
47 A 1554	245	L	2	Red	Screw	.54
47 A 1611	250	L	2	Black	Solder	.51
47 A 1614	S250	L	2	Black	Solder	.54
47 A 1612	255	L	2	Red	Solder	.51
47 A 1555	260	L	3	Black	Screw	.84
47 A 1616	267	L	3	Black	Solder	.75
47 A 1573	270	M	2	Metal	Screw	.75
47 A 1613	280	M	2	Metal	Solder	.72
47 A 1556	R280	M	2	Metal	Solder	.93
47 A 1719	S280	M	2	Metal	Solder	.72
47 A 2967	290	M	3	Metal	Screw	.99
47 A 1617	297	M	3	Metal	Solder	.93

STANDARD PHONE PLUGS

Standard-size ¼", 2-and 3-conductor type phone plugs to fit all standard jacks. Metal (shielded), red or black molded bakelite handles; 2¹⁄₁₆" long, ¾" diameter, except *1" long. Type 170 is similar to 70, but has 2-piece handle with cable clamp for ¼" cable. No. 190A is similar to 90, but has same handle as 170. Metal (shielded) handle types are for use in microphone or input cables and wherever continuous shielding is required. Av. shpg. wt., 5 oz.

Stock No.	Type	Fig.	Cond.	Color	Terminals	EACH
47 A 1557	40	L	2	Black	Screw	.57
47 A 1447	45	L	2	Red	Screw	.57
47 A 1558	60	L	3	Black	Solder	.75
47 A 1559	70	M	2	Metal	Screw	.90
47 A 1562	170	N	2	Metal	Screw	1.17
47 A 1563	190A	N	3	Metal	Solder	1.38
47 A 1560	90*	R	3	Metal	Solder	.96
47 A 1561	160*	R	2	Metal	Screw	.72

"LUG-PLUG" PHONE PLUGS

Low-cost two-conductor, phone plugs. All fit ¼" jacks. Have solder terminals. Exterior parts bright nickel plated. Black handle is 1¹¹⁄₁₆" long, ½" diameter. Type 380 has shielded, bare metal handle 1¹⁄₁₆" long, ½" diameter. Av. shpg. wt. 4 oz.

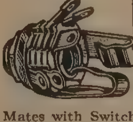
Stock No.	Type	Figure	Color	EACH
47 A 1564	350	L	Black	.45
47 A 1566	380	P	Metal	.57

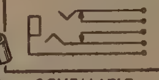
FLAT PHONE PLUGS

¼" phone plugs featuring flat, space-saving handles. Ideal for applications where conventional plugs would protrude too far and interfere with operation of equipment, prevent installation in tight quarters, etc. Fig. T units have easily removable plastic handle; Fig. S units have shielded steel handle, bright nickel plated. Types 220 and 225 will accept standard phone tips. Type S230 is commercial version of Military Type PJ-068 plug; has .206" diameter sleeve and tip. Terminals and body are mechanically interlocked. Av. shpg. wt. 4 oz.

Stock No.	Type	Fig.	Cond.	Color	Terminals	EACH
47 A 2969	238	S	3	Metal	Solder	1.02
47 A 2968	228	S	2	Metal	Solder	.69
47 A 1621	220	T	2	Black	Screw	.78
47 A 1567	225	T	2	Red	Screw	.78
47 A 1502	227	T	2	Black	Solder	.63
47 A 1568	230	T	3	Black	Screw	.96
47 A 1569	235	T	3	Red	Screw	.96
47 A 1503	237	T	3	Black	Solder	.93
47 A 2970	S230	T	3	Black	Solder	1.23

STEREO "LITTEL-JAX"



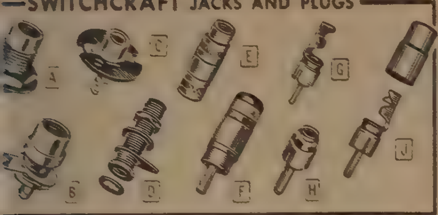


SCHEMATIC

Three-conductor jack for switching-out speakers when connecting stereo headphones and for switching three-wire stereo input circuits. Mates with Switchcraft ¼" "Littel-Plugs" such as 260, 267, 269 and 297. Insulation XXP phenolic. Spring-tempered nickel-silver alloy. Integral contacts standard in the separate switching circuits. Nickel-plated brass bushing mounts in ⅜" dia. hole. Length behind panel, 1". With locknut and washer. Shpg. wt., 3 oz.
47 A 4924. Type 14B...**Each .72**

Connectors, Jacks and Plugs

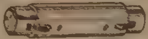
—SWITCHCRAFT JACKS AND PLUGS



nstall phonograph jacks, phono pin plugs, and extensions 3 oz.

k	Mfr's Type	Fig.	Description	EACH
900	3501FR	A	Jack, rear-panel mtg. 7/16" mtg. hole	.27
902	3501FP	B	Jack, front-panel mtg. ¼" dia.	.21
574	3501F	C	Standard 2 cond. audio jack	.09
904	371	D	Adapter to mount 3501FP in panels up to 1¼" thick	.66
778	3503	E	Extension jack, shielded. Removable 13/32" O.D. shell w/cable clamp	.39
762	3502	F	Plug, shielded. 13/32" O.D. easy-grip handle	.30
763	3501MC	G	Plug, unshielded, ⅓" O.D. shell, cable clamp	.09
509	3501M	H	Plug for 3501F, 3501FP, 3501FR, 3503	.06
575	3508-1	J	Phono plug, red handle	.15
576	3508-2	J	Phono plug, black handle	.15
577	3508-5	J	Phono plug, white handle	.15

AUDIO CONNECTOR ADAPTERS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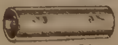
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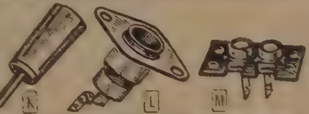
dio Adapter. Adapts a three pin audio or input such as Switchcraft A3M, C3M, D3M and Cannon XLR-3-12C, 11, etc.) to equipment or cable assemblies ave the same type of output termination. 1 1, 2 2, 3 3. 263. Shpg. wt., 3 oz. .... **Each 2.85**

dio Adapter. Adapts three-contact audio or insert to equipment or cable assemblies ave the same type of output termination. 264. Shpg. wt., 3 oz. .... **Each 2.40**

. SMITH MOTOROLA AND RCA-TYPE PLUGS, JACKS

. Antenna lead- to connect auto a lead-in to ra- dia ⅛" **Fig.** to mate with plug ⅝" mtg. **ig. M.** Jacks to CA-type phono ½x1". 1 oz.

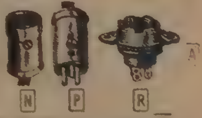


ock o.	Mfr's. Type	Fig.	Description	PER PKG. OF 6 1-19	PER PKG. OF 6 20-up
1135	1200	K	Motorola-Type Plug	.70	.53
1137	1207	L	Motorola Type Jack	.60	.51
1138	1214	M	Double Phono Jack	1.08	.90

AMPHENOL CONNECTORS

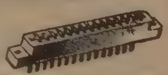
SERIES 78 AND 91 MINIATURE CABLE CONNECTORS

Compact connectors for shielded or unshielded cables. Polarized contacts prevent incorrect insertion. For cables up to ¼" dia. Last letter in Type No. indicates: L, long (1³⁄₁₆"); S, short (¹³⁄₁₆"). Last fig. in Type No. denotes no. of contacts. PCG—chassis type. Figs. N and R are female types; Fig. P, male type. Av. shpg. wt., 2 oz.



Stock No.	Type	Fig.	EA.	Stock No.	Type	Fig.	EA.
47 A 0320	91-MPF3L	N	.47	47 A 0574	91-MPM4S	P	.39
47 A 0571	91-MPF3S	N	.41	47 A 0570	91-MPM5L	P	.44
47 A 0321	91-MPF4L	N	.49	47 A 0328	91-MPM6L	P	.47
47 A 0572	91-MPF4S	N	.46	47 A 0330	78-PCG3	R	.31
47 A 0325	91-MPM3L	P	.42	47 A 0331	78-PCG4	R	.35
47 A 0573	91-MPM3S	P	.37	47 A 0332	78-PCG5	R	.39
47 A 0326	91-MPM4L	P	.43	47 A 0333	78-PCG6	R	.40

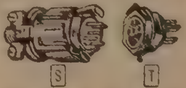
SERIES 143 PRINTED-CIRCUIT RECEPTACLES



For PC networks. Mate with standard .055" to .073" PC board. "Circle Lip" contact entrance ensures firm contact with varying thicknesses of board; will not set. Diallyl phthalate dielectric; nontarnishing gold-plated contacts. Contacts on .156" centers. Maximum card insertion length is 1.097" for 143-006; 3.597" for 143-022. Average breakdown voltage: 5400 volts DC at sea level; 1150 volts DC at 60,000 feet. All are rated at 5 amps. *Polarizing key. Av. wt., 3 oz.

Stock No.	Type 143-	Contacts	EACH	Stock No.	Type 143-	Contacts	EACH
47 A 1090	006-01	6	1.04	47 A 0501	018-01	18	1.44
47 A 0503	010-01	10	1.16	47 A 0502	022-01	22	1.68
47 A 2675	012-01	12	1.21	47 A 2676	953	*	.02
47 A 0500	015-01	15	1.25	....	....	....	....

MINIATURE RACK PANEL AND CABLE CONNECTORS



Molded of diallyl phthalate dielectric material. Solder contacts gold finished over silver plating. Fig. T is hex nut type with threaded body for direct mounting to panel. Has locking clip for mating with Fig. S, hood and cable-clamp type. Fig. S is two piece for easy wiring, has cable clamp for strain relief of soldered connections. Locking ring engages locking clip on mating unit. Both Fig. S and Fig. T available with either socket or pin contacts. Voltage breakdown, 2000 volts rms 60 Hz at sea level. Current rating, 7.5 amps. Diameter of locking clip type, ⅝"; hood and clamp type, ¾". Length of cable-clamp type 1¹⁵⁄₆₄". *Female version of Fig. S; †male version of Fig. T. 5 oz.

MALE CONNECTORS

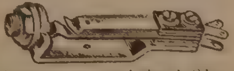
Stock No.	Mfr's Type	Contacts	Fig.	EA.	Stock No.	Mfr's Type	Contacts	Fig.	EA.
47 A 0644	126-217	5	S	1.40	47 A 0638	126-216	5	†	.67
47 A 0646	126-195	7	S	1.54	47 A 0640	126-197	7	†	.80
47 A 0648	126-220	9	S	1.66	47 A 0642	126-219	9	†	.92

FEMALE CONNECTORS

Stock No.	Mfr's Type	Contacts	Fig.	EA.	Stock No.	Mfr's Type	Contacts	Fig.	EA.
47 A 0645	126-223	5	*	1.81	47 A 0639	126-218	5	T	1.08
47 A 0647	126-196	7	*	2.09	47 A 0641	126-198	7	T	1.35
47 A 0649	126-222	9	*	2.39	47 A 0643	126-221	9	T	1.66

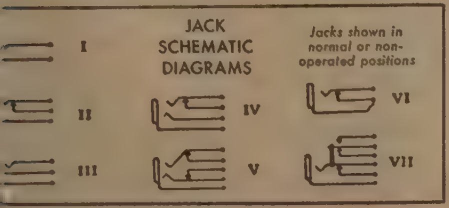
MALLORY PHONE JACKS

LONG-FRAME PHONE JACKS



rial-type jacks are ideal for ones, microphone cord and nnections, etc. Take standard one plugs. Mount in ⅜" dia. panels up to ¼" thick by of a ⅜" threaded shank. um plated frames; bushings and springs are nickel plated. Silver s for low contact resistance. Size, 2⅝x1⅛x⅝" wide. *Indicates r of conductors in mating plug. Av. shpg. wt., 4 oz.

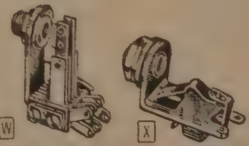
ck .	Mfr's Type	*Cond.	Circuit	Diagram	EACH 1-9	EACH 10-49
745	1	2	Open	I	.50	.45
747	2A	2	Closed	II	.63	.57
055	5	2	Closed & Transfer	VII	.99	.89


JACK SCHEMATIC DIAGRAMS

Jacks shown in normal or non-operated positions

JUNIOR PHONE JACKS

W Compact jacks for standard ¼" phone plugs. Require only 1⁵⁄₁₆" behind panel. Cadmium-plated frames; nickel plated brass shank, springs, mtg. hardware. ⅜" dia. threaded shank for panels ¼" thick. Silver contacts. *Conductors in mating plug. Wt., 3 oz.



Stock No.	Mfr's Type	*Cond.	Circuit	Diagram	EACH 1-9	EACH 10-49
47 A 1054	701	2	Open	I	.50	.45
47 A 1751	702A	2	Closed	II	.63	.57
47 A 1058	702B	3	Open	III	.63	.57
47 A 1059	703B	3	Closed-Transfer 1	IV	.66	.59
47 A 1060	704B	3	Closed-Transfer 2	V	.76	.68

MIDGET AND INFANT PHONE JACKS

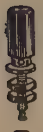
X Extremely small "Midget" and "Infant" type jacks for limited-space applications. All take ¼" phone plugs. "Midget" type jacks require only 1³⁄₃₂" mounting space behind panel; "Infant" type requires only ⅛" behind panel. Cadmium-plated steel frames with nickel-plated brass shank, springs, and mounting hardware. ⅜" threaded shank for mounting in panels up to ¼" thick. *Conductors in mating plug. All are "Midget" type except A-1 "Infant" type jack (not illustrated). Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	*Cond.	Circuit	Diagram	EACH 1-9	EACH 10-49
47 A 1050	A-1	2	Open	I	.36	.33
47 A 1051	A-2	2	Shorting	VI	.53	.48
47 A 1053	A-2A	2	Closed	II	.63	.57
47 A 1056	A-3A	2	Closed-Transfer 1	VII	.73	.65

Binding Posts, Plugs and Jacks

H. H. SMITH

5-WAY AND MULTI-PURPOSE BINDING POSTS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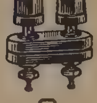
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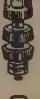
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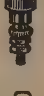
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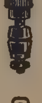
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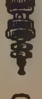
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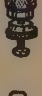
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A **Type 208.** Five-way metal binding post. Accepts banana plug, phone tip, spade lug, alligator clip or wire strand. Mounts in .171" hole in panels from 1/16" to ⅜" thick. Body: brass, nickel-plated. Head: captive, hex brass nickel-plated. Has wrap-around solder stud. With 2 mounting nuts. Shpg. wt., 3 oz.
47 A 1327... **Each .40**

B **Type 224 BB.** Dual 5-way binding post assembly with black, insulated fluted heads. Accepts single or dual banana plugs. Mounts in two ½" holes on ¾" mounting centers in panels up to ¼" thick. Has solder stud. ¾x1½" base. Body: brass, nickel-plated. With 4 mtg. nuts. Wt., 4 oz.
47 A 1328... **Each .77**

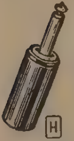
B **Type 269BB.** Similar to Type 224, above, but has black hex-grip insulated heads. Shpg. wt. 4 oz.
47 A 1329... **Each .83**
47 A 1324. Type 269 RB. Above, but one black, one red head **Each .83**

Multi-Purpose Posts. Rated 2000 V, 30 amps. Captive heads. Length shown is total closed. For panels 1/16-¼" thick. *Locking edge. †Banana-plug jack in head; also accepts phone tip, lug, etc. ‡Grounding types. §Take solder connection to stud. Av. shpg. wt., 2 oz.

Stock No.	Type	Fig.	Mounting	Length	Color	EACH
47 A 1368	257*†§	C	½"	1 43/64"	Red	.44
47 A 1367	257*†§	C	½"	1 43/64"	Black	.44
47 A 1330	220†‡	D	11/64"	1¼"	Red	.26
47 A 1335	220†‡	D	11/64"	1¼"	Black	.26
47 A 1388	260*†	E	5/16"	1 11/16"	Red	.49
47 A 1389	260*†	E	5/16"	1 11/16"	Black	.49
47 A 1394	377‡§	F	11/64"	1⅜"	Red	.42
47 A 1395	377‡§	F	11/64"	1⅜"	Black	.42
47 A 1397	378§	F	23/64"	1⅜"	Red	.42
47 A 1398	378§	F	23/64"	1⅜"	Black	.42

G **Type 110.** Brass, for heavy-duty use. 21/32" long. 3/16" mounting hole. Rated at 50 amps, 60 Hz AC. Shpg. wt., 2 oz.
47 A 1371... **Each .29**

STANDARD ¼" PHONE PLUGS AND JACK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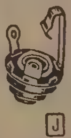
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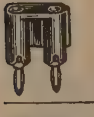
2-conductor phone plugs and jack. Plugs have screw-type terminals and are available with either red or black break-resistant Tenite plastic handles; all metal parts, except screws, have nickel plating. Terminals, insulation, plus body and tip rod are mechanically interlocked to prevent turning. Overall length, 2⅞". Open circuit, 2-conductor jack has ⅜" diameter threaded shank 9/32" long; requires only 1" behind panel. Interlocked for dependable operation. Av. shpg. wt., 3 oz.

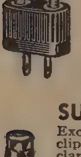
Stock No.	Type	Fig.	Description	EACH
47 A 1017	222	H	Standard Phone Plug **(black)**	.61
47 A 1018	222	H	Standard Phone Plug **(red)**	.61
47 A 1019	275	J	Standard Phone Jack	.32

DOUBLE PLUG



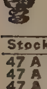
Type 210. Dual plug for standard banana jacks. Molded as a unit on ¾" centers. Jacks in top permit use of units in tandem. Body: molded polystyrene, per Fed. Spec. L-P416, Type I. Brass plug, nickel plated. Accepts phone tips or wire up to #12, held with internal set screw. Polarity indicated on top and side. Has 15-ampere rating. Body size, 1 5/16x1¾". Shpg. wt., 3 oz.
47 A 1792... **Each .72**

SUPERIOR AC 5-WAY BINDING POST



Type DAP15BWC Dual-Adapter Binding Post. Facilitates line voltage connections from AC output receptacles to binding posts. Has integral parallel-blade plug. Rated at 15 amps, 125 volts. Brass parts are gold-plated. Accepts spade lugs, banana plugs, clip leads, up to No. 12 wire through .098" dia. holes, or wire wrapped around shafts. Has black body with 1 white and 1 black thumbnut. Shpg. wt., 3 oz.
47 A 1041..1-9....Each 2.00   10-99....Each 1.50

SUPERIOR HEX-NUT TYPE BINDING POSTS

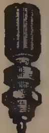


Exceptionally versatile posts take spade lugs, banana plugs, clip leads, up to No. 12 wire through center hole, or looped and clamped around shaft. All have gold-plated brass current-carrying parts and durable nylon plastic insulator and captive nut except type GP30NC, which is nickel-plated grounding-type binding post. All rated 30 amps at 1000 volts. Mount in ½" holes in panels 1/16" to ¼" thick. Size, 2 3/64x½" diameter. With hexagonal thumbnut. Shpg. wt., 2 oz.

Stock No.	Type	Color	Stock No.	Type	Color
47 A 1172	DF30YC	Yellow	47 A 1178	DF30RC	Red
47 A 1173	DF30GNC	Green	47 A 1198	DF30BLC	Blue
47 A 1174	DF30WTC	White	47 A 1000	GP30NC	Nickel
47 A 1177	DF30BC	Black			

Your Choice... **Each .50**

E. F. JOHNSON



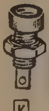
Six-Way Molded Binding Posts. Silver-plated brass shan Insulation resistance over 200 megohms. Rated at 15 amps; brea down, 8000 VDC. Size, 1 5/16x7/16" diameter with 5/16"-32 nut f mounting in 21/64" diameter hole. Available in white, red, blac green, blue, and yellow. Shpg. wt., ½ oz.

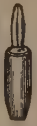
Stock No.	Type	Color	Stock No.	Type	Color
47 A 6323	111-101	White	47 A 6333	111-104	Green
47 A 6329	111-102	Red	47 A 6290	111-110	Blue
47 A 6332	111-103	Black	47 A 6335	111-107	Yellow

Your Choice... **Each .3**

111-20 Mounting Plate. Etched aluminum. For mtg. 2 nyl binding posts or banana jacks on ¾" ctrs. 1¼x½". 2 oz.
47 A 6336... **Each .0**

BANANA JACKS AND PLUGS

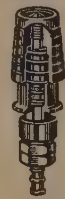

K


L

Series 108. Low-loss body. Capacity to 1/16" met panel, 2.4 pF. Breakdown test 10,000 VDC. Jac (fig. K) have cadmium-plated insert. Supplied wi 5/16"-32 nut for mtg. jack in 21/64" dia. hole. Plugs (fi L) have one-piece nickel-plated brass body and p with nickel-silver springs. Solderless connection tak up to No. 16 stranded wire. Insulating sleeve plug. 6 colors. Overall lengths: jack, 15/16"; plug, 1 Av. shpg. wt., 2 oz.

Color	Stock No.	Type	Fig.	EA.	Stock No.	Type	Fig.	EA
White	47 A 6371	108-901	K	.10	47 A 6379	108-301	L	.1
Red	47 A 6372	108-902	K	.10	47 A 6380	108-302	L	.1
Black	47 A 6373	108-903	K	.10	47 A 6381	108-303	L	.1
Green	47 A 6374	108-904	K	.10	47 A 6382	108-304	L	.1
Blue	47 A 6297	108-910	K	.10	47 A 6298	108-310	L	.1
Yellow	47 A 6377	108-907	K	.10	47 A 6384	108-307	L	.1

ACI UNIVERSAL "ADLOC" BINDING POS

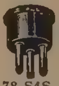


- "Push" for Quick Positive Lock and Disconnect
- Secure Connections Are Made from the Top

Push down on top, insert wire (up to 12 gauge), relea and positive contact is made instantly. To disconne just push again. Can take several wires at same time. Al accepts spade lugs, plugs, clamps and prods. Brass nick plated post, nylon plastic insulator. Rated 30 amps 1000 V rms. Mounts in .314" hole in panels 1/32" to ¼ Size, 2 3/32x⅝". Wt., 3 oz.
24 A 9025. Type AL2000B. Black.......... **Each .5**
24 A 9026. Type AL2000R. Red............ **Each .5**

AMPHENOL MINIATURE AND STANDARD PLUGS

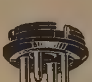
TYPE 71 MINIATURE HIGH-DIELECTRIC PLUGS



Compact, efficient, high-dielectric plugs. Excellent for tran mitters, receivers, intercoms and speaker connections. Secur ly anchored, nickel-plated brass prongs; deeply recessed prevent shorts caused by pulled back insulation. Easily sol ered. For cables with up to six conductors. Contacts a polarized to assure proper connections. Fit Amphenol 78-S3 78-S4S, 78-S5S, 78-S6S retainer-ring type miniature sockets listed page 371. Rated 5 amps @ 500V. Shpg. wt., 2 oz.

Stock No.	Mfr's Type	Prongs	EA.	Stock No.	Mfr's Type	Prongs	EA.
47 A 0177	71-3S	3	.11	47 A 0149	71-5S	5	.15
47 A 0169	71-4S	4	.14	47 A 0179	71-6S	6	.17

TYPE CP STANDARD BAKELITE PLUGS

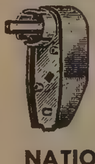


Bakelite plugs for chassis connectors with plug-in unit Use adapter plate below for replacement mounting. r voltage ratings: 86-CP4, 2000 V; CP-11 and CP-12, 5 V; all others, 1250 V. With mounting ring of 1 11/64" hol †Have guide post and aligning key. CP7S has small pi Fit Amphenol MIP standard tube sockets, page 37 Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Pins	EA.	Stock No.	Mfr's Type	Pins	EA
47 A 0015	86-CP4	4	.23	47 A 0020	86-CP8†	Oct.	.2
47 A 0016	86-CP5	5	.23	47 A 0021	86-CP9†	9	.2
47 A 0017	86-CP6	6	.25	47 A 0022	86-CP11†	11	.2
47 A 0019	86-CP7S	7	.26	47 A 2654	86-CP12†	12	.2

Type 12-001-03 Adapter Plate. Nickel-plated steel. For use with CP plugs above. 1½" to 1⅞" mtg. centers. 2 oz.
47 A 0023... **Each .**

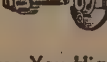
G-C ELECTROCRAFT SOLDERLESS PHONO PLUGS



Handy right-angle design for fast, positive connectio Plastic shells. For std. shielded cable with 3/16" O Overall length, 1 7/32". Pin dia., ⅛". Shpg. wt., 2

Stock No.	Mfr's Type	Shell Color	EACH 1-9	EACH 10-9
47 A 6117	33-776	Gray	.31	.28
47 A 6118	33-778	Black	.31	.28
47 A 6119	33-780	Red	.31	.28

NATIONAL TEL-TRONICS PIN PLUG AND JACK



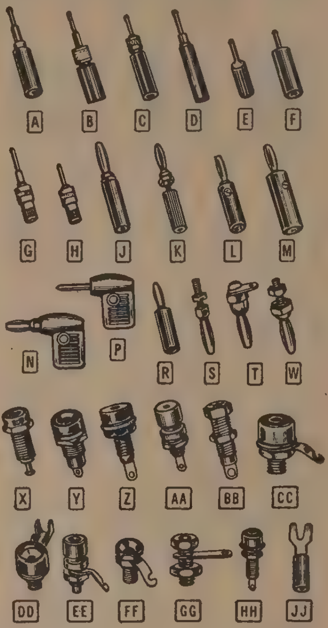
Standard phono pin plug and jack used in mo hi-fi equipment. Take single conductor shield cable. Av. shpg. wt., 2 oz. **10 per pkg.**
47 A 6057. Pin Plug 36C.......... **Per Pkg. .3**
47 A 6058. Pin Jack 318.......... **Per Pkg. .4**

Plugs, Jacks, Sockets and Connectors

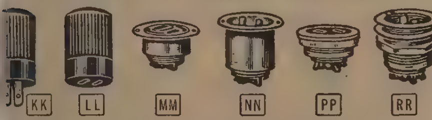
GC ELECTRONICS TOP-QUALITY PLUGS AND JACKS

Quality plugs and jacks for a wide range of applications in radio and hi-fi equipment, test instruments, etc. All feature highest-quality construction for long-life reliability. Nickel-plated brass bodies for nigher current applications. Unbreakable plastic handles. Order from table at left. Shpg. wt., 10 oz.

No.	Type	Fig.	Connector	Color	Length	PKG. OF 5
9600	33-110-1	A	Insulated heavy-duty phone tip plug	Red	$2\frac{1}{8}$"	.98
9601	33-110-2	A	Insulated heavy-duty phone tip plug	Black	$2\frac{1}{8}$"	.98
9602	33-106	B	"Senior" solderless insulated phone tip plug	Red	$2\frac{1}{8}$"	.98
9603	33-108	B	"Senior" solderless insulated phone tip plug	Black	$2\frac{1}{8}$"	.98
9604	33-144-1	C	"Junior" solderless insulated phone tip plug	Red	$1\frac{29}{32}$"	.98
9605	33-144-2	C	"Junior" solderless insulated phone tip plug	Black	$1\frac{29}{32}$"	.98
9606	33-112	D	Subminiature insulated phone tip plug	Red	$1\frac{23}{32}$"	1.18
9607	33-114	D	Subminiature insulated phone tip plug	Black	$1\frac{23}{32}$"	1.18
9610	33-116-1	E	Hollow insulated phone tip plug	Red	$1\frac{1}{8}$"	.75
9611	33-116-2	E	Hollow insulated phone tip plug	Black	$1\frac{1}{8}$"	.75
9612	33-118	F	Insulated short phone tip plug	Red	$1\frac{1}{2}$"	.85
9613	33-120	F	Insulated short phone tip plug	Black	$1\frac{1}{2}$"	.85
9614	33-146	G	Non-insulated "Senior" phone tip plug	.....	$1\frac{21}{32}$"	.85
9615	33-142	H	Non-insulated "Junior" phone tip plug	.....	$1\frac{3}{16}$"	.85
9616	33-000	J	Insulated spring-tip banana plug	Red	$1\frac{13}{16}$"	1.60
9617	33-002	J	Insulated spring-tip banana plug	Black	$1\frac{13}{16}$"	2.10
9618	33-028-1	K	Insulated spring tip banana plug	Red	$1\frac{15}{16}$"	2.10
9619	33-028-2	K	Insulated spring tip banana plug	Black	$1\frac{15}{16}$"	1.10
9620	33-006	L	Insulated spring tip banana plug	Red	$1\frac{5}{8}$"	1.10
9621	33-008	L	Insulated spring tip banana plug	Black	$1\frac{5}{8}$"	1.10
9622	33-018	M	Insulated split tip banana plug	Red	$1\frac{9}{16}$"	1.10
9623	33-020	M	Insulated split tip banana plug	Black	$1\frac{9}{16}$"	1.10
9624	33-032-1	R	Insulated spring tip banana plug	Red	$1\frac{5}{8}$"	1.10
9625	33-032-2	R	Insulated spring tip banana plug	Black	$1\frac{5}{8}$"	1.85
9626	33-046	N	Right-angle banana-type meter plug	Red	$\frac{13}{32}$"	1.85
9627	33-048	N	Right-angle banana-type meter plug	Black	$\frac{13}{32}$"	1.75
9628	33-128	P	Right-angle meter tip plug	Red	$\frac{1}{2}$"	1.75
9629	33-130	P	Right-angle meter tip plug	Black	$\frac{1}{2}$"	1.30
9635	33-034	S	Non-insulated spring-tip banana plug	.....	$1\frac{9}{32}$"	1.10
9636	33-062	T	Non-insulated spring-tip banana plug	.....	$\frac{29}{32}$"	1.30
9637	33-064	W	Non-insulated spring-tip banana plug	.....	$1\frac{3}{4}$"	1.75
9638	33-240	X	Miniature nylon tip jack	Red	$\frac{5}{16}$"	1.75
9639	33-242	X	Miniature nylon tip jack	Black	$\frac{5}{16}$"	1.18
9640	33-216	Y	Insulated nylon tip jack	Red	$1\frac{1}{32}$"	1.18
9641	33-218	Y	Insulated nylon tip jack	Black	$1\frac{1}{32}$"	.98
9644	33-210	Z	Insulated nickel-plated brass tip jack	Red	1"	.98
9645	33-212	Z	Insulated nickel-plated brass tip jack	Black	1"	1.50
9646	33-208-1	AA	Insulated nylon tip jack	Red	....	1.50
9647	33-208-2	AA	Insulated nylon tip jack	Black	....	.85
9648	33-226	BB	Non-insulated tip jack	.....	....	.98
9649	33-180	CC	Non-insulated banana jack	Red	$\frac{43}{64}$"	.98
9650	33-182	CC	Non-insulated banana jack	Black	$\frac{43}{64}$"	.98
9651	33-186	DD	Insulated banana jack	Red	....	.98
9653	33-188	DD	Insulated banana jack	Black	....	1.60
9654	33-220-1	EE	Insulated banana jack	Red	....	1.60
9455	33-220-2	EE	Insulated banana jack	Black	....	.85
9656	33-184	FF	Non-insulated banana jack	.....	....	.85
9658	33-192	GG	Non-insulated banana jack	.....	....	1.10
9659	33-194	HH	Insulated combination jack	Red	$1\frac{5}{32}$"	1.10
9662	33-196	HH	Insulated combination jack	Black	$1\frac{5}{32}$"	.85
9663	33-300	JJ	Banana plug to spade-lug adapter	Red	$1\frac{39}{64}$"	.85
9664	33-302	JJ	Banana plug to spade-lug adapter	Black	$1\frac{39}{64}$"	.85



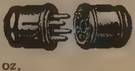
ARROW H&H MIDGET CONNECTORS



get 2-prong cord connectors and receptacles. Especially suited for cations where space is at a premium. Types illustrated in Figures KK LL have housings of durable molded bakelite. Others have rust-tant metal housings and insulation of bakelite. All units are rated at mperes at 250 volts. A 1" diameter hole is required for all receptacles. act spacing is $\frac{13}{32}$". Receptacle terminals are exposed. All units take aded covers. Types 80326 and 80328 are furnished with plate for ws. Types 80327 and 80329 are furnished with plate and lock ring. shpg. wt., 3 oz.

ck No.	Mfr's Type	Fig.	Description	EACH
A 2191	80324	KK	Male cable connector	1.07
A 2192	80325	LL	Female cable connector	1.07
A 2193	80326	MM	Female flush receptacle	1.27
A 2194	80328	NN	Male flush receptacle	1.42
A 2195	80327	PP	Female flush receptacle	2.09
A 2196	80329	RR	Male flush receptacle	2 15

MPHENOL CABLE CONNECTORS



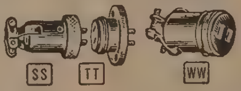
ching male and female cable connectors. Take es up to $\frac{7}{16}$" O.D. Series 78-PF are female con-cors; series 86-PM are male. "S" in type num-indicates small pins. Size $1\frac{3}{16}$x$1\frac{3}{32}$". Av. wt., 3 oz.

tock No.	Mfr's Type	Con-tacts	EACH	Stock No.	Mfr's Type	Con-tacts	EACH
A 0524	78-PF4	4	.41	47 A 0505	86-PM5	5	.45
A 0525	78-PF5	5	.43	47 A 0506	86-PM6	6	.47
A 0526	78-PF6	6	.45	47 A 0507	86-PM7S	7S	.57
A 0527	78-PF7S	7S	.47	47 A 0508	86-PM8	8	.47
A 0528	78-PF8	8	.43	47 A 0512	86-PM9	9	.48
A 0516	78-PF9	9	.46	47 A 0513	86-PM11	11	.49
A 0517	78-PF11	11	.50	47 A 2655	86-PM12	12	.50
A 0504	86-PM4	4	.45	....	....	......	......

phenol Cable Clamp. Type 79-CC4. For use with above connec- Relieves strain on soldered connections. Shpg. wt., 5 oz.
A 0670..Each .09

CINCH-JONES SERIES 202 PLUGS AND SOCKETS

Cadmium-plated brass plugs and sockets. Type P-202-CCT is polarized. Knurled nut. Type S-202-B socket mtg. holes, No. 30 drill on 1" centers. All units have ¾"-27 thread. Type P-202-CCT and S-20-CCT-THR have cable clamp. Av. shpg. wt., 3 oz.



Stock No.	Type	Fig.	Description	EACH
47 A 0980	P-202-CCT	SS	Plug, 2 contact	1.09
47 A 0982	S-202-B	TT	Socket, base mounting	1.32
47 A 0981	S-202-CCT-THR	WW	Socket, extension	1.46

PLUGS AND SOCKETS

Type 2R2 Chassis-Mounting AC Socket. Molded, black bakelite AC socket excellent for radio, TV chassis, phono, and similar applications. Rated at 15 amps at 110 volts or 10 amps at 250 volts. Accepts any 2-prong standard electric plug. Solder-lug terminals. Mounts in $\frac{25}{64}$x$\frac{25}{32}$" hole. Has $\frac{9}{64}$" diameter mounting holes on $1\frac{1}{8}$" centers. Size $1\frac{1}{2}$x$\frac{1}{2}$". Recognized Under the Component Program of Underwriter's Laboratories, Inc. Shpg. wt., 2 oz.
47 A 0830..21

Type 8PB 8-Contact Plug. For making up to 8 connections between chassis. Molded from high-dielectric black bakelite. Nickel-plated pins have tapered ends for easy insertion. Fits any standard octal socket. Use with 16F shield, below. Shpg. wt. 2 oz.
47 A 0846..............................24

Type 11PB 11-Contact Plug. Same as above, but with 11 contacts. Fits 11RB socket, below. Use with 16F snap-on shield below. Shpg. wt., 2 oz.
47 A 0847..31

Type 16F Steel Snap-On Shield. (Not illus.) Cadmium-plated steel plug cap. Snaps on 8PB and 11 PB sockets, above. Has screwdriver slot at bottom to facilitate removal. Rubber grommet with $\frac{25}{64}$" diameter hole protects cable. Shpg. wt., 2 oz.
47 A 0848..77

Type 11 RB 11-Contact Socket. Use with 11 PB 11-contact plug above, for making up to 11 contacts between chassis. Molded black bakelite. Mounts on $\frac{1}{16}$" thick chassis using retaining ring. Use with 16F shield (above) on extension cables. Wt., 2 oz.
47 A 0849..33

Connectors, Plugs, Sockets and Terminal Strips

HUBBELL "TWIST-LOCK" CONNECTORS

A

B

C

D

E

F

G

H

Feature unique "Twist Lock" design for positive lock-fast electrical connections. Units lock with a twist of the cap; you simply plug in, twist and they lock. Connectors never disconnect accidentally regardless of the treatment to which they are subjected. Ensures a maximum of safety and a minimum of time loss. Conform to National Electrical Code Standard. Av. shpg. wt., 3 oz.

MIDGET 2-WIRE NON-POLARIZED TYPES

Type 7428 male cap and Type 7427 female connector are of brown bakelite with metal cable clamps for 5/16 to 1/2" O.D. cords. Type 7466 male base and Type 7468 female base are of bakelite with brass nickel finish housings. Rated 10 amps at 250 volts or 15 amps at 125 volts.

Stock No.	Mfr's Type	Fig.	Description	EACH 1-9	EACH 10-49
47 A 1282	7428	A	Male Cap	.53	.47
47 A 1283	7427	B	Female Connector	.97	.86
47 A 1284	7466	C	Male Base	1.15	1.02
47 A 1287	7468	D	Female Base	1.40	1.24

MIDGET 3-WIRE POLARIZED TYPES

As above but for 3-conductor cables. Insulation is black bakelite. Clamps accept cords from .281 to .421" O.D. Polarization prevents wrong connection. Rated 10 amps at 250 V, or 15 amps at 115 V.

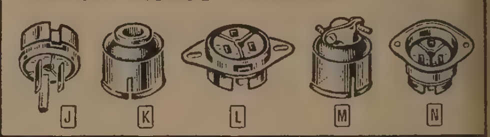
Stock No.	Mfr's Type	Fig.	Description	EACH 1-9	EACH 10-49
47 A 1288	7485	A	Male Cap	1.26	1.12
47 A 1289	7484	B	Female Connector	1.81	1.61
47 A 1290	7486	C	Male Base	1.61	1.43
47 A 1291	7487	D	Female Base	1.96	1.74

STANDARD AND HEAVY-DUTY 3-WIRE POLARIZED TYPES

Type 7572, 7556 and 7557 have rust-resistant metal housings. Type 7555 is bakelite. Clamps take cords from 19/64" to 9/16" O.D. All rated 10 amps at 250 V, 15 amps at 125 V. *Armored, †heavy-duty. Wt., 4 oz.

Stock No.	Mfr's Type	Fig.	Description	EACH 1-9	EACH 10-49
47 A 1292	7572	E	Male Cap*	1.49	1.33
47 A 1296	7311	E	Male Cap*†	2.15	1.91
47 A 1293	7555	F	Female Conn.	2.36	2.10
47 A 1297	7313	F	Female Conn.†	3.30	2.94
47 A 1294	7556	G	Male Base	1.96	1.74
47 A 1295	7557	H	Female Base	2.17	1.93

AMPHENOL PLUGS AND SOCKETS



SERIES 61 AND 160 STANDARD AND GROUNDING-TYPE AC PLUGS AND SOCKETS

Series 61 comprises standard two-pole AC plugs and sockets. Series 160 consists of heavy-duty grounding types that are especially recommended for grounding appliances and power tools. Rated 15 amps at 120 volts, AC-DC, and 10 amps at 220 volts. Plugs and sockets are black phenolic, and ■U.L. Recog., except Types 160-10 and 160-11 which must be grounded after mounting. Av. shpg. wt., 3 oz.

J **Retainer Ring Mounting Types.** For mounting in 1 11/64" keyed hole in chassis up to 1/8" thick. 61-M is standard type; 61-F is universal type. *Includes prong and third terminal for ground wire. All units listed are 2-pole types.

Stock No.	Type	Descrip.	EA.	Stock No.	Type	Descrip.	EA.
47 A 0675	61-M	Male	.37	47 A 2522	*160-10	Female	.85
47 A 0677	61-F	Female	.37	47 A 2523	*160-11	Male	1.01

L **Mounting Plate Types.** All require 1 9/32" mtg. holes and have 5/32" slotted holes on 1 1/2" to 1 7/8" centers except Type 61-MIP-61F which requires 1 3/16" mtg. hole and has 5/32" holes on 1 1/2" centers. Types 61-M1 and 61-F1 have removable mtg. plates. *With terminal for ground wire. All 2-pole.

47 A 0680	61-M1	Male	.46	47 A 2525	*160-3	Male	1.10
47 A 0682	61-F1	Female	.44	47 A 0085	61-MIP-61F	Female	.40
47 A 2524	*160-2	Female	.93				

Type 61-61 Recessed Shell Only. (Not illus.) Converts Type 61, 86 and 160 connectors to recessed types. Fits 1 7/16" hole; two 5/32" screw holes on 1 3/4" centers. Lowers connector 1 3/16". Wt., 2 oz.

47 A 0086 .... **Each .14**

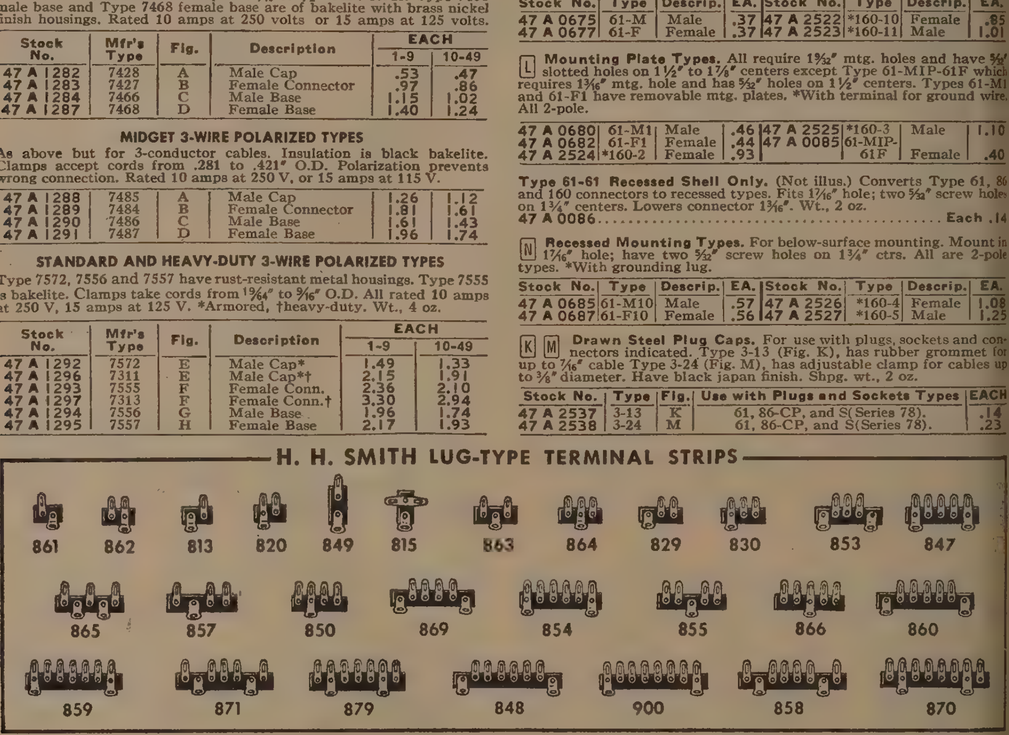
N **Recessed Mounting Types.** For below-surface mounting. Mount in 1 7/16" hole; have two 5/32" screw holes on 1 3/4" ctrs. All are 2-pole types. *With grounding lug.

Stock No.	Type	Descrip.	EA.	Stock No.	Type	Descrip.	EA.
47 A 0685	61-M10	Male	.57	47 A 2526	*160-4	Female	1.08
47 A 0687	61-F10	Female	.56	47 A 2527	*160-5	Male	1.25

K M **Drawn Steel Plug Caps.** For use with plugs, sockets and connectors indicated. Type 3-13 (Fig. K), has rubber grommet for up to 7/16" cable Type 3-24 (Fig. M), has adjustable clamp for cables up to 3/8" diameter. Have black japan finish. Shpg. wt., 2 oz.

Stock No.	Type	Fig.	Use with Plugs and Sockets Types	EACH
47 A 2537	3-13	K	61, 86-CP, and S(Series 78).	.14
47 A 2538	3-24	M	61, 86-CP, and S(Series 78).	.23

H. H. SMITH LUG-TYPE TERMINAL STRIPS



Dark brown bakelite strips, 1/16" thick x 3/8" wide. Solder-coated steel lugs have 3/8" centers. 9/16" dia. mtg. holes. Av. wt., 2 oz. 10 **per pkg.**

Stock No.	Type	PER PKG.	Stock No.	Type	PER PKG.	Stock No.	Type	PER PKG.	Stock No.	Type	PER PKG.
47 A 4320	861	.27	47 A 4327	864	.36	47 A 4334	850	.48	47 A 4341	871	.66
47 A 4321	862	.29	47 A 4328	829	.34	47 A 4335	869	.61	47 A 4342	879	.78
47 A 4322	813	.30	47 A 4329	830	.36	47 A 4336	854	.66	47 A 4343	848	.80
47 A 4323	820	.30	47 A 4330	853	.54	47 A 4337	855	.42	47 A 4344	900	.78
47 A 4324	849	.36	47 A 4331	847	.66	47 A 4338	866	.48	47 A 4345	858	.84
47 A 4325	815	.38	47 A 4332	865	.54	47 A 4339	860	.72	47 A 4346	870	.86
47 A 4326	863	.36	47 A 4333	857	.48	47 A 4340	859	.72			

H. H. SMITH SCREW-TYPE TERMINAL STRIPS

Screw-type terminal strips for chassis and breadboarding applications. Have solder-coated brass terminal lugs on 7/16" centers; .136" dia. mounting holes. 1/16" thick bakelite strips; except* 3/32". Av. wt., 2 oz.

Stock No.	Mfr's Type	Term.	Pkg. of 5	Stock No.	Mfr's Type	Term.	Pkg. of 5
47 A 4079	872	2	.44	47 A 4084	877	7	1.36
47 A 4080	873	3	.66	47 A 4085	928	8	1.44
47 A 4081	874	4	.80	47 A 4086	929	9	1.68
47 A 4082	875	5	1.02	47 A 4087	930*	10	1.92
47 A 4083	876	6	1.18				

H. H. SMITH SERIES 3000 TERMINAL STRIPS

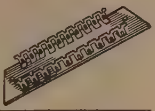
Selection of compact terminal strips, of .019 brass, tin-plated, and spaced on 5/16" centers. Molded bakelite insulation. Mounting brackets are made of cadmium-plated steel. Mounting holes at each end of bracket. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Term	Mtg. Ctrs.	Pkg. of 5	Stock No.	Mfr's Type	Term	Mtg. Ctrs.	Pkg. of 5
47 A 1462	3002	2	1"	.36	47 A 1466	3006	6	2 1/4"	.60
47 A 1463	3003	3	1 5/16"	.42	47 A 1468	3008	8	2 7/8"	.68
47 A 1464	3004	4	1 5/8"	.48	47 A 1470	3010	10	3 1/2"	.79
47 A 1465	3005	5	1 15/16"	.54	47 A 1475	3012	12	4 1/8"	.90

■Recognized Under the Component Program of Underwriter's Laboratories, Inc.

Terminal Strips, Board, Terminals, Insulators

ELGIN ELECTRONICS STRIP PACK®

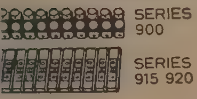


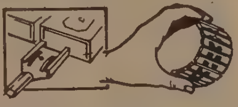
pack component boards consist of olic boards with continuous metal termi- inserted. Prior to component insertion, inal connections are cutout in accordance the required circuitry, leaving connector ers where needed. **Type 205**, 1⅛" wide, between rows; **Type 228**, 1½" wide, 1¼" een rows. 5/32" mounting holes.

tock No.	Mfr's Type	No. Term.	EACH	Stock No.	Mfr's Type	No. Term.	EACH
A 2697	205-1	5	.36	47 A 2704	228-1	5	.54
A 2698	205-2	10	.42	47 A 2710	228-2	10	.60
A 2699	205-3	15	.45	47 A 2717	228-3	15	.66
A 2700	205-4	20	.50	47 A 2718	228-4	20	.71
A 2701	205-5	25	.60	47 A 2719	228-5	25	.80
A 2703	205-6	30	.66	47 A 2724	228-6	30	.86

NATIONAL TEL-TRONICS

SOLDERLESS TERMINAL BLOCKS

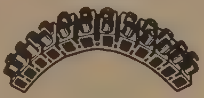




es 900 molded of hard polyvinylchloride. Red polyvinylchloride buttons. 27 amps maximum, 440 V. 70° C maximum. Beryllium cop- :ontacts. **Series 915 and 920** flexible blocks are for use with ¼" h terminals. Transparent polyvinylchloride. 20 amps maximum, 250)° C maximum. *Number of terminals. 1 oz.

Stock No.	Mfr's Type	Description	Size, In., L.xW.xD.	EACH 1-9	EACH 10-24
A 1857	900-12*	Pushbutton	4⅞x¾x¾	1.23	1.11
A 1858	900-24*	Pushbutton	9¾x¾x¾	2.31	2.08
A 1859	915 12*	Flexible	5⅝x¼x1⅛	.52	.46
A 1868	915 24*	Flexible	11¼x¼x1⅛	1.03	.92
A 1869	920-12*	Flexible	5⅝x¼x1 21/32	.52	.46
A 1870	920-24*	Flexible	11¼x¼x1 21/32	1.03	.93

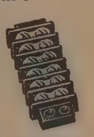
-T 905 SOLDERLESS BLOCKS



l in any direction to fit contours,) angles. Polyester. 30 amps max., 7. 60°C max. Each ½x⅝x3¾" width between term. centers. 1 oz.

ı 1871. 1-9............Each 1.95
4..........................Each 1.76

CINCH-JONES BARRIER TERMINAL STRIPS



Make a long leakage path and prevent direct shorts caused by frayed wires at the terminals. Base is molded bakelite, with mounting holes at ends. Eyelets and binder screws of nickel-plated brass; terminals of hot tin-finish brass. When used with fanning strips, insure positive contact and firm connections. No. 140 terminal strips have 5-40x 3/16" binder head screws, ¼" metal-to-metal spacing. No. 141 types have 6-32x¼" binder head screws, ⅜" metal-to-metal spacing. No. 142 types have 8-32x5/16" binder head screws, 9/16" metal-to-metal spacing. Av. shpg. wt., 5 oz.

Series 140. Metal-to-metal spacing over bakelite ¼". Base ⅞" wide x3/32" high. ⅜" centers.

Stock No.	Type	Term.	EACH	Stock No.	Type	Term.	EACH
47 A 1800	2-140	2	.23	47 A 1804	8-140	8	.63
47 A 1801	3-140	3	.27	47 A 1582	9-140	9	.70
47 A 1803	4-140	4	.34	47 A 1805	10-140	10	.77
47 A 1807	5-140	5	.42	47 A 1583	11-140	11	.83
47 A 1802	6-140	6	.48	47 A 1806	12-140	12	.92
47 A 1581	7-140	7	.55	.....	....	......	....

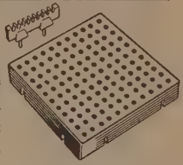
Series 141. Metal-to-metal spacing over bakelite ⅜". Base 1⅛" wide x ½" high. 7/16" centers.

Stock No.	Type	Term.	EACH	Stock No.	Type	Term.	EACH
47 A 1835	2-141	2	.26	47 A 1838	6-141	6	.61
47 A 1836	3-141	3	.34	47 A 1839	8-141	8	.80
47 A 1837	4-141	4	.44	47 A 1840	10-141	10	.99
47 A 1842	5-141	5	.54	47 A 1841	12-141	12	1.16

Series 142. Metal-to-metal spacing over bakelite 9/16". Base 1 5/16" wide x ⅝" high. 9/16" centers.

Stock No.	Type	Term.	EACH	Stock No.	Type	Term.	EACH
47 A 1670	2-142	2	.30	47 A 1674	6-142	6	.75
47 A 1671	3-142	3	.41	47 A 1676	8-142	8	.98
47 A 1672	4-142	4	.53	47 A 1678	10-142	10	1.21
47 A 1673	5-142	5	.64	47 A 1680	12-142	12	1.43

ALCO CB-1 CIRCUIT BOARD



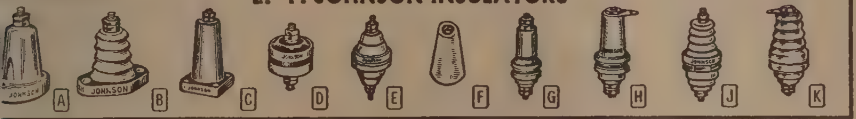
Provides an excellent base for various types of breadboarding. Designed to accept Alco-strip series MEP-NB, which may be inserted and removed as desired. Two or more units may be fastened together to form larger board. Rugged high-impact material. Size, 5x6". Shpg. wt., 4½ oz.

47 A 6796............................Each .95

CB-2 Kit. Complete ceramic kit includes 16 strips (8 sizes), and above 5x6" mating circuit board to form a base for experimental design work. Wt., 1 lb.

47 A 0001..10.95

E. F. JOHNSON INSULATORS



A Wide Selection of Quality Insulators for Every Need

nd-Off Insulators. High glaze porcelain (except *steatite). Long age path, low capacity and freedom from moisture absorption. Nickel- ed brass hardware includes screw, flat washer, two nuts. Type 135- ribbed; others have drawn bases. †Similar to Figure B, but square and 4 mounting holes. Av. shpg. wt., 1 lb.

tock No.	Mfr's Type	Fig.	Body Ht.	Min. Dia.	Max. Dia.	Mtg. Ctrs.	Hard-ware	EACH
A 6235	135-20*	A	1 9/16"	¾"	1¾"	1 5/16"	10-32	.43
A 6237	135-22*	A	1"	15/32"	1 5/32"	13/16"	8-32	.26
A 6239	135-24*	A	⅝"	⅜"	1"	11/16"	6-32	.21
A 6240	135-60	†	4½"	1 3/16"	2½"	1⅞"	¼-20	1.40
A 6241	135 62	†	2¾"	⅞"	1⅞"	1⅜"	¼-20	.81
A 6242	135-65	B	1⅜"	⅝"	1⅞"	1½"	10-32	.44
A 6248	135-66	C	2¾"	15/16"	1¾"	1⅜"	¼-20	.99
A 6251	135-67	C	4½"	1 1/16"	2¼"	1¾"	¼-20	1.40

u-Panel Types. Porcelain except *steatite. †108-740 jack. 12 oz.

:ock No.	Mfr's Type	Fig.	Body Ht.	Min. Dia.	Max. Dia.	Panel Hole	Hard-ware	EACH
A 6200	135-40*	G	1¾"	19/32"	15/16"	7/16"	10-32	.55
A 6202	135-42*	G	1¼"	½"	¾"	13/32"	10-32	.50
A 6203	135-42-2	H	1¼"	½"	¾"	13/32"	†	.66
A 6205	135-44*	G	15/16"	⅜"	⅝"	5/16"	6-32	.39
A 6206	135-45	J	2 1/16"	⅝"	1¼"	½"	10-32	.77
A 6210	135-46	G	3¾"	15/16"	1⅝"	11/16"	¼-20	1.69
A 6211	135-47	G	6"	1 1/16"	2⅛"	31/32"	¼-20	2.80
A 6215	135-48	J	2⅞"	¾"	1⅝"	11/16"	10-32	1.19
A 6216	135-48-2	K	2⅞"	¾"	1⅝"	11/16"	†	1.35

Lead-in Bushings. Ideal high-voltage terminals. All are constructed of steatite for excellent RF insulating characteristics. Supplied complete with nickeled brass rod and nuts. Av shpg. wt., 8 oz.

Stock No.	Mfr's Type	Fig.	Body Ht.	Min. Dia.	Max. Dia.	Panel Hole	EACH
47 A 6217	135-50	E	1"	⅜"	¾"	15/32"	.46
47 A 6219	135-51	E	1⅝"	⅝"	1¼"	27/32"	.76
47 A 6220	135-52	E	2¼"	⅞"	1¾"	1 9/32"	.99
47 A 6223	135-55	D	½"	½"	¾"	15/32"	.37

F **Ultra-Steatite Cone Insulators.** Non-ribbed. With nickel-plated, brass hardware. Av. shpg. wt. 5 oz.

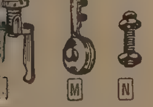
Stock No.	Mfr's Type	Body Ht.	Min. Dia.	Max. Dia.	EACH
47 A 6224	135-500	⅝"	7/16"	⅝"	.26
47 A 6231	135-501	1"	½"	¾"	.35
47 A 6232	135-502	1½"	½"	1"	.65
47 A 6233	135-503	2"	⅝	1⅛	.96
47 A 6234	135-504	3	¾"	1½"	1.68

ANTENNA-FEEDER SPREADERS

(Not illus.) For constructing high efficiency, open-wire antenna feeders and transmission lines. Silicone impregnated, moisture-proof porcelain. ⅜x½". Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	Length	EACH
47 A 6257	136-122	2"	.20
47 A 6258	136-124	4"	.34
47 A 6259	136-126	6"	.50

TERMINAL LUGS, SNAPS AND STUDS



L **Terminal Lugs.** Screw-mount to chassis. 2 solder lugs. 10 per pkg. Shpg. wt., 10 oz.

47 A 1767................................Per Pkg. .51

M **Nu-Way Snaps.** For temporary or permanent connections. 7/16x⅞" dia. 10 per pkg. 12 oz.

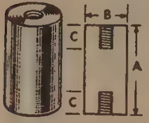
24 A 9034.................................Per Pkg. .98

N **Nu-Way Snaps.** For panel or chassis mtg. Fit snaps. Size, 6-32 x ½". 10 per pkg. Shpg. wt., 12 oz.

24 A 9031...Per Pkg. .79

Insulators, Coil Forms, Clips, Spacers, Tube Caps

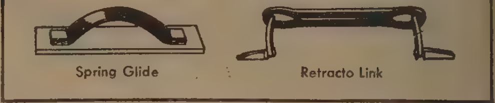
H. H. SMITH CERAMIC STAND-OFF INSULATORS



Commercial-grade threaded insulators specially designed for a wide variety of RF applications where leakage loss must be held to a minimum. Grade L-5 ceramic is employed and outside is highly glazed to prevent absorption of moisture and avoid leakage losses. All except Type 2640 are threaded at both ends to accept 6-32 or ¼-20 machine screws. Type 2640 is threaded throughout. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	Dimensions A	Dimensions B	Dimensions C	Thread	PER PKG. OF 10 1-4	PER PKG. OF 10 5-9
47 A 4347	2640	¼″	¼″	Thru	6-32	1.60	1.34
47 A 4348	2641	½″	¼″	5⁄32″	6-32	1.64	1.37
47 A 4349	2642	⅜″	⅜″	5⁄32″	6-32	1.70	1.42
47 A 4350	2643	½″	⅜″	3⁄16″	6-32	2.03	1.69
47 A 4351	2644	½″	½″	9⁄64″	6-32	2.22	1.85
47 A 4352	2645	¾″	½″	¼″	6-32	2.34	1.95
47 A 4353	2646	1″	½″	⅜″	6-32	2.58	2.15
47 A 4355	2647	1½″	½″	9⁄16″	6-32	2.94	2.45
47 A 4356	2648	2½″	½″	½″	6-32	3.10	2.67
47 A 4357	2649	2½″	¾″	¼″	¼-20	4.32	3.60

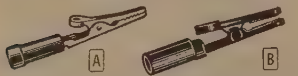
H. H. SMITH LEATHER EQUIPMENT HANDLES



Sturdy equipment handles available in two styles. Rugged construction makes them stand up to even the most frequent and hard usage. Each handle is black leather with matching stitching. **Spring Glide** style has contoured handle which moves up for carrying and down when not in use. Will not rattle under extreme sound conditions. Chrome plated caps. **Retracto-Link** style has handles which attach with rivets or screws; drop down when not in use. Assemble in minutes. Heavy nickel-plated steel hardware included. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	Description	Length	EACH 1-49
47 A 4354	2089	Spring Glide	6″	3.00
47 A 4365	2093	Retracto-Link	4½″	2.70
47 A 4366	2094	Retracto-Link	5½″	2.70
47 A 4367	2095	Retracto-Link	6¾″	2.70

H. H. SMITH ADAPTER CLIPS



Alligator clips with jacks in handle to accept tip and/or banana plugs. Cadmium-plated steel.

A PLASTIC-HANDLE ALLIGATOR CLIPS

Type 305 With Combination Tip-Jack and Banana Jack. Ideal for use with test prods. Aids servicing. 2 oz.
47 A 1168. Red .47 47 A 1169. Black .47

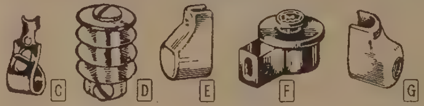
Type 304 With Tip Jack. Accommodates standard tip-plug only. 2 oz.
47 A 1300. Red .40 47 A 1305. Black .40

B ALL-INSULATED ALLIGATOR CLIPS

Type 337 With Banana Jack. Accommodates banana plug-in receptacle end. 2 oz.
47 A 1382. Red .29 47 A 1383. Black .29

Type 336 With Tip Jack. Accommodates standard tip plug in receptacle end. 2 oz.
47 A 1373. Red .43 47 A 1374. Black .43

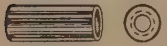
TRANSMITTING STANDARD TUBE CAPS



Heat dissipating types (Fig. D) have set-screw. Type 36011 (Fig. F) gives tight grip to insure good contact. Shpg. wt., per package, 3 oz.

Stock No.	Fig.	Description and Application	Pkg. of	PER PKG.
47 A 2514	C	National Type GG-24-2. For standard tubes, ⅜″ dia. grid caps.	5	.25
47 A 2515	C	National Type 8. For octal tubes, ¼″ diameter grid caps.	5	.40
47 A 2518	C	National Type GG-12-2 grid and plate cap. 9⁄16″.	3	.24
47 A 2096	D	Eimac HR-6 heat dissipating cap for 4-250A, 304TH, etc. 23⁄64″ hole.	1	2.20
47 A 3086	D	Bud TC-487 heat dissipating cap for UH50, HK24, 304B, 832A, 834. 1⁄16″ hole.	1	.90
47 A 3089	D	Bud TC-1921 heat dissipating cap for 866, T125, HF100, 450TH, 750TH, 809, 811, 812, 813, 828, 866, etc. 9⁄16″ hole.	1	1.00
47 A 2175	E	National SPP-9 ceramic-insulated grid and plate cap. 9⁄16″	1	.24
47 A 3243	F	Millen 36011 industrial snap-action-release, self-locking plate cap. 9⁄16″.	1	.90
47 A 3244	G	Millen Type 36002 steatite tube cap. ⅜″	1	.33
47 A 3245	G	Millen Type 36004 steatite tube cap. ¼″	1	.39
47 A 3246	G	Millen 36001 steatite plate cap for 866, etc. 9⁄16″.	1	.34

H. H. SMITH BRASS SPACERS



ROUND

Round spacers designed for use in raising sub panels, chassis, condensers, transformers, other electronic parts and assemblies. Constructed of durable cadmium-plated brass. Precision machined—lengths and outer diameters accurately controlled to ±1⁄32″ tolerance. Available in your choice of round, non-threaded type or round, threaded types; in lengths from ⅛ to 1″. Tapped bushings for threads indicated in table below. **Packed 10 spacers per package.** Av. shpg. wt. per pkg., 6 oz.

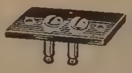
ROUND—NON-THREADED ¼″ O.D.

Stock No.	Mfr's Type	Screw Size	Length	PKG. OF 10
47 A 4718	2340	4	¼″	.33
47 A 4720	2342	4	½″	.53
47 A 4721	2343	4	¾″	.63
47 A 4632	8701	6	⅛″	.25
47 A 4724	2100	6	¼″	.33
47 A 4725	2101	6	⅜″	.44
47 A 4726	2102	6	½″	.53
47 A 4728	2103	6	¾″	.63
47 A 4729	2104	6	1″	.72
47 A 4730	2105	8	¼″	.33
47 A 4634	8707	8	5⁄16″	.37
47 A 4732	2107	8	½″	.53
47 A 4734	2109	8	1″	.72

ROUND—THREADED ¼″ O.D.

Stock No.	Mfr's Type	Tap	Length	PKG. OF 10
47 A 4755	2370	4-40	¼″	.39
47 A 4756	2371	4-40	⅜″	.50
47 A 4758	2372	4-40	⅝″	.60
47 A 4759	2373	4-40	¾″	.84
47 A 4760	2374	4-40	1″	1.04
47 A 4650	8773	6-32	9⁄16″	.65
47 A 4761	2120	6-32	¼″	.39
47 A 4765	2121	6-32	⅜″	.50
47 A 4766	2122	6-32	½″	.60
47 A 4767	2123	6-32	¾″	.84
47 A 4768	2124	6-32	1″	1.04
47 A 4774	2129	8-32	1″	1.04

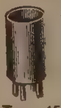
H. H. SMITH HEAVY-DUTY STRIPS



Made of 3⁄32″ thick black bakelite, ⅞″ wide. Have 8-32x5⁄16″ nickel-plated screw terminals and cadmium-plated brass solder lugs. Drilled for 2-hole mtg. Av. wt., 4 oz.

Stock No.	Type	Term.	EACH
47 A 1875	902	2	.24
47 A 1880	903	3	.26
47 A 1885	904	4	.32
47 A 1895	906	6	.48
47 A 1898	908	8	.60

MILLEN MOLDED COIL FORMS

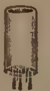


Type 45004. Molded-mica, phenolic base type coil forms. Four-prong type. For shortwave receivers and low-power transmitters. Size: 1″ diameter; 113⁄32″ winding length; 23⁄16″ overall. Shpg. wt., 2 oz.
47 A 3217........................**.58**

Type 45005. Same as 45004, but has 5 prongs. Shpg. wt., 2 oz.
47 A 3218........................ **.58**

Type 45000. Same as Type 45005 above, but without prongs. Designed for screw mounting. Shpg. wt., 2 oz.
47 A 3219........................**.45**

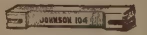
MAYFAIR POLYSTYRENE COIL FORMS



A selection of coil forms for winding RF coils of all types. Low loss polystyrene construction. 5 and 6 prong standard forms fit standard tube sockets; 5-prong miniature type fits Amphenol Type 78-S5S miniature socket (see under "Retainer Ring Sockets" in socket section). Av. wt., 2 oz.

Stock No.	Mfr's Type	Description	Size L. X Dia.	EA.
47 A 6693	24-5H	5-Prong Min.	19⁄16x¾″	.28
47 A 6696	24-5P	5-Prong Std.	2¼x1¼″	.27
47 A 6697	24-6P	6-Prong Std.	2¼x1¼″	.40

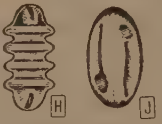
JOHNSON ANTENNA INSULATORS



Strain-type insulators. All are porcelain-glazed to prevent moisture absorption, and prevent RF leakage. Superior quality units with heavily glazed surfaces and heavy, nickel-plated brass hardware suitable for exposed applications. Type 136-107 insulator is wet process 1″-diameter round design with 800 lbs. breaking strength. Type 136-104 is dry process, ⅝″ square with 400 lbs. breaking strength.

Stock No.	Mfr's Type	Size	Shpg. Wt.	EACH
47 A 6254	136-104	4″x⅝″ sq.	4 oz.	.30
47 A 6255	136-107	7″x1″ dia.	10 oz.	1.35

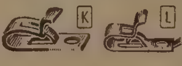
CONSOLIDATED ANTENNA INSULATORS



H Dependable glazed porcelain insulator. Efficient ribbed construction provides long leakage path. 2½″ long. Shpg. Wt., 2 oz. **4 per pkg.**
47A6051. Pkg./.40

J White porcelain strain insulator, 1½x⅞″ dia. Breaks up guy lines into non-resonant lengths. 2 oz. **4 per pkg.**
47 A 6052. Per Pkg.........................**.48**

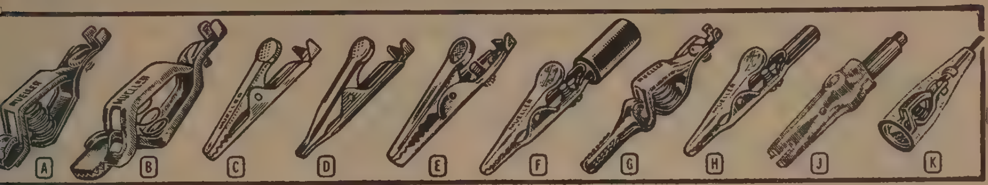
FAHNESTOCK SPRING CLIPS



Positive, reliable contact. Easy to connect and disconnect. Made of brass, except *bronze. Av. shpg. wt., 3 oz. per pkg.

Stock No.	Mfr's Type	Fig.	LxW Inches	Max. Wire	Mtg. Hole	PKG. of 10
47 A 1700	2	K	1x⅜	10	8	.25
47 A 1702	3	K	11⁄16x⅜	10	8	.32
47 A 1705	10	K	¾x5⁄16	14	6	.20
47 A 1703	5	L	11⁄16x⅜	10	8	.36
47 A 1707	15*	L	½x7⁄32	16	4	.20

Assorted Test Clips, Terminals, Crimping Tools



MUELLER CLIPS AND FLEXIBLE INSULATORS

MESH-TEETH TEST CLIPS

For general-purpose use. Interlocking necks prevent jaw offset. Type 45C, solid pper; Type 45, cadmium-plated steel. Av. pg. wt. per 100 pieces, 1 lb.

Stock No.	Mfr's Type	Amps	Size	Per Pkg. of 10
7 A 5001	45	5	1½"	.61
7 A 5006	45C	10	1½"	1.07

LEAD-PLATED BATTERY CLIPS

For moderately heavy current work, battery charging, electroplating, and light lding. Stands erect. Shpg. wt., per 100; ¼, §15, ‡36 lbs. *Marking.

Stock No.	Mfr's Type	Amps	*	Size	EACH	
					1-9	10-99
A 5021	†24A	25	+	2⅞"	.26	.177
A 5022	†24A	25	None	2⅞"	.26	.177
A 5023	§21A	50	+	4"	.46	.32
A 5024	§21A	50	None	4"	.46	.32
A 5027	‡11A	100	None	6"	1.27	.89

SOLID-COPPER CLIPS

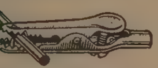
Heavy-duty, high-conductivity clips constructed of solid copper. Compact design. pg. wts. per 100 pieces: Type 25C, 6¾ lbs.; C, 18 lbs.; 11C, 41 lbs.

7 A 5073	25C	75	None	3"	.49	.34
7 A 5031	21C	100	+	4½"	1.20	.84
7 A 5032	21C	100	None	4½"	1.20	.84
7 A 5033	11C	200	+	6"	2.34	1.64
7 A 5034	11C	200	None	6"	2.34	1.64

3-SIDED MESH-TEETH CLIPS

Good jaw spread and current carrying capacity. §Indicates cadmium-plated steel; olid copper. †Insulation-piercing needle. Jaws en ⅝". Wt., per 100, ⅝-inch maximum. Av. pg. wt. per 100, 3¼ lbs.

Stock No.	Mfr's Type	Amps	Size	EA. 1-9	MULTIPLES OF 10, EA.
7 A 5010	§48B	10	2"	.13	.09
7 A 5078	*48C	20	2"	.20	.14
7 A 5087	*†50C	20	2¼"	.32	.22
7 A 5015	§27	20	2 7/16"	.16	.11
7 A 5088	*51C	20	2¼"	.22	.15
7 A 5074	25	40	3"	.24	.17
7 A 5097	*27C	40	2 7/16"	.27	.19



TYPE 60-NS ALLIGATOR NEEDLE CLIP

leal for any application where it is desirable pierce the insulation of a wire to make a ore direct connection. Slim jaws open 5/16" aximum and have beryllium copper needle. Vire centering notches hold conductor secure-. Screw type. Shpg. wt., per 100, 1 lb. **Prices er pkg. of 10.**

7 A 5014. 1-9. . Ea. 1.32 10-49. . Ea. 1.12

"MINI-GATOR" CLIPS

C 3/16" jaw opening, 11/64" O.D. tip, including insulator. Type 30, cadmium-plated steel; 30C, solid copper. Per 100, 4 oz. **Pkg. of 10.**

Stock No.	Mfr's Type	Amps	Size	Per Pkg. of 10	
				1-9	10-49
47 A 5140	30	5	1 1/16"	.50	.43
47 A 5141	30C	10	1 1/16"	.61	.53

"MICRO-GATOR" CLIPS

D Similar to "Mini-gators" but with tiny tip for small terminals, etc. §Cadmium-plated steel; *solid copper. ¼ lbs. per 100 pcs.

47 A 5178	§34	. . . . . .	1 3/32"	.41	.36
47 A 5179	*34C	. . . . . .	1 3/32"	.53	.46

70 SERIES ALLIGATOR CLIPS

E §Cadmium-plated steel; *solid copper; †solder connection; ‡screw connected. Wt. per 100 pieces, 1 lb.

47 A 5173	§†70	5	1 11/16"	.45	.38
47 A 5174	§‡70S	5	1 11/16"	.54	.46
47 A 5175	*‡70CS	10	1 11/16"	.85	.73

INSULATED BARREL ALLIGATOR CLIPS

F Cad.-plated steel, except *solid copper. Jaws open 5/16". Per 100, 1½ lbs. †Handle.

Stock No.	Mfr's Type	Size	†	Per Pkg. of 10	
				1-9	10-49
47 A 5081	60HS	2 11/32"	Red	.89	.76
47 A 5082	60HS	2 11/32"	Black	.89	.76
47 A 5083	*60CHS	2 11/32"	Red	1.18	1.01
47 A 5084	*60CHS	2 11/32"	Black	1.18	1.01

85 SERIES CROCODILE CLIPS

G ‡Phone tip on one jaw. Screw connections. Wt., per 100, 1¾ lbs.

Stock No.	Mfr's Type	Size	Material	Ea. 1-9	Multiples of 10, Ea.
47 A 5060	85	2⅛"	Cad.-plated	.11	.08
47 A 5062	85C	2⅛"	Solid copper	.21	.15
47 A 5098	‡85T	2⅝"	Cad.-plated	.27	.19

60 SERIES ALLIGATOR CLIPS

H †Solder type; "S"—screw type. Per 100, 1 lb. **Prices per pkg. of 10.** *1-9, §10-49.

47 A 5011	†60	2"	Cad.-plated	.54*	.47§
47 A 5012	60S	2"	Cad.-plated	.63*	.54§
47 A 5013	60CS	2"	Solid copper	.96*	.82§

INSULATED ALLIGATOR CLIPS

J No. 63 clip, cadmium-plated steel; No. 63C clip, solid-copper type. *Red or black insulator. Size, 2⅛". Av. shpg. wt., per 100 pcs., 1¾ lbs.

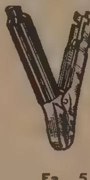
Stock No.	Type	Amps	*	Each 1-9	Multiples of 10, Ea.
47 A 5145	63	5	Red	.19	.13
47 A 5146	63	5	Black	.19	.13
47 A 5147	63C	10	Red	.22	.15
47 A 5148	63C	10	Black	.22	.15

SLIP-ON INSULATORS FOR CLIPS

K Tough, flexible vinyl plastic insulators for maximum protection. High dielectric strength; holds clip firmly; resistant to oils and grease. Insulator covers entire clip except for end of nose. Long tail affords extra protection and prevents breakage of wire. Available in both red and black. Av. shpg. wt., 5 oz. *Manufacturer's type.

Stock No.	*	For Series	Color	EACH	
				1-9	10-99
47 A 5036	13	11	Red	.81	.57
47 A 5037	13	11	Black	.81	.57
47 A 5038	23	21	Red	.41	.28
47 A 5039	23	21	Black	.41	.28
47 A 5041	26	24, 25	Red	.23	.16
47 A 5042	26	24, 25	Black	.23	.16
47 A 5043	29	27	Red	.17	.12
47 A 5044	29	27	Black	.17	.12
47 A 5046	32	30	Red	.05	.03
47 A 5047	32	30	Black	.05	.03
47 A 5051	36	34	Red	.05	.03
47 A 5052	36	34	Black	.05	.03
47 A 5053	47	45	Red	.07	.05
47 A 5054	47	45	Black	.07	.05
47 A 5056	49	48, 50	Red	.10	.06
47 A 5057	49	48, 50	Black	.10	.06
47 A 5058	62	60, 70	Red	.06	.04
47 A 5059	62	60, 70	Black	.06	.04
47 A 5061	72	70	Red	.06	.04
47 A 5063	72	70	Black	.06	.04
47 A 5064	87	85	Red	.07	.05
47 A 5066	87	85	Black	.07	.05

HIPPO AND PIGMY HIPPO HIGH-CURRENT CLIPS

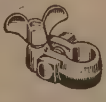


Plier clips for fast battery chargers and battery-booster cables. Tough vinyl insulating sleeves marked for polarity. Solder strap and cable clinching ears. Locks on battery terminal in any position. 1 9/16" jaw spread; 6" long. Copper-plated steel. Rated 100 amps. Wt., per 100, 41 lbs.

47 A 5076. Red. Positive. . . . .**Ea. .51**
47 A 5077. Black. Negative. . . . .**Ea. .51**

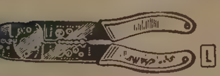
Type 46-A. Pigmy-hippo clip. Above, but 1⅛ spread. 3" long. 50 amps. 5¼ lbs. per 100.
47 A 5071. Red. Positive. . . . .**Ea. .17**
47 A 5072. Black. Negative. . . . .**Ea. .17**

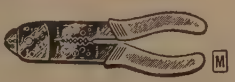
TRIPLE A BATTERY BINDING POST



Versatile battery binding post with 250-amp rating. Separate threaded terminal for cables with lugs. Shpg. wt. 5 oz.
47 A 1785. . . . .**56**

A-MP CRIMPING TOOLS

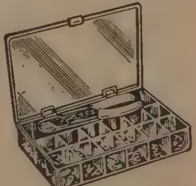




Type 47100-1 "Super Champ" Crimping Tool. Crimps insulated solderless terminals, shears machine screws, measures stud sizes, uts and strips wire from standard AWG 22 thru 10. Shears bolts in 10-4, 10-32, 8-32, 6-32 and 4-40 sizes. Constructed of rugged tool steel, vith comfortable insulated plastic handles. Length, 7⅜". Shpg. wt., 1 lb.
7 A 5321. . . . .**4.95**

M **Type 49835-1.** For crimping non-insulated terminals. Otherwise has same versatile features as above—shears machine screws, neasures stud sizes, cuts and strips wire. Shpg. wt., 1 lb.
7 A 4453. . . . .**4.95**

A-MP TERMINAL KIT

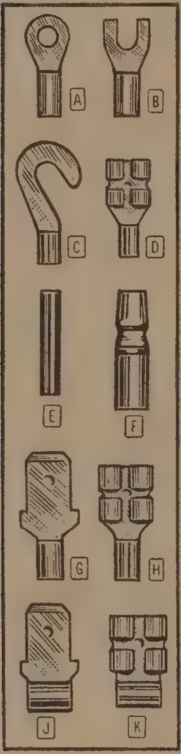


Type 29033. Terminal kit includes an assortment of the most popular insulated terminals used for general wiring applications, a heavy-duty type 47100-1 Super-Champ crimping tool (shown at left), plus a transparent plastic storage case. Storage case has individual compartments for different size terminals and crimping tool—makes it easy to select the proper terminal at a glance. Ideal for radio-TV and electrical servicemen. Saves time by eliminating the necessity of soldering. Crimping tool firmly affixes terminal to wire with a minimum of effort, makes a very satisfactory electrical connection. Tool may also be used with all wire sizes from No. 10 gauge to No. 22 gauge. Will also shear machine screws, measure stud sizes, cut and strip wire from No. 22 gauge through 10. Storage case, 9¾x5½x2".
47 A 5322. Shpg. wt., 2 lbs. **24.00**

Solderless Terminals, Tools, Sockets, Test Prods

VACO INSULATED AND NON-INSULATED SOLDERLESS TERMINALS

Vaco Single-Grip Solderless Terminals. Form perfect electrical connections. Ideal for general-purpose work or radio, TV and appliance servicing. Of chrome-plated copper alloy. Series 10000 are one-piece non-insulated types. Series 50000 are insulated; heavy plastic sleeve provides insulation from tongue to wire covering. (E) Butt connector; (F) snap terminal; (D, H) female tab socket; (G) ¼" male tab; (J) ¼" angle male tab; (K) angle female tab socket. Use crimping tool, below. Wts., pkg. of 100, 8-oz.; economy pack, 3 oz.



STANDARD PACKAGES OF 100							$1.00 ECONOMY PACKAGES							
ALL NON-INSULATED TERMINALS							NON-INSULATED				INSULATED			
Wire Size	Stud Size	Lgth.	Fig.	Stock No.	Mfr's Type	PER PKG. of 100	Stock No.	Type	Pkg. Qty.	PER PKG.	Stock No.	Type	Pkg. Qty.	PER PKG.
22-18	4	19/32"	A	47 A 4200	11204	2.71	......	.....	.....	.....	......	.....	.....	.....
22-18	5-6	17/32"	A	47 A 2800	11205	2.71	47 A 4476	11205	32	1.00	47 A 4269	51205	16	1.00
22-18	5-6	3/4"	A	47 A 2801	11206	2.71	44 A 4481	11206	32	1.00	47 A 4270	51206	16	1.00
22-18	8	43/64"	A	47 A 4201	11208	2.71	......	.....	.....	.....	......	.....	.....	.....
22-22	10	3/4"	A	47 A 2802	11210	2.71	47 A 4482	11210	32	1.00	47 A 4272	51210	16	1.00
16-14	5-6	17/32"	A	47 A 2803	11305	2.71	......	.....	.....	.....	......	.....	.....	.....
16-14	5-6	23/32"	A	47 A 2804	11306	2.71	......	.....	.....	.....	47 A 4275	51306	16	1.00
16-14	8	23/32"	A	47 A 4204	11308	2.71	......	.....	.....	.....	......	.....	.....	.....
16-14	10	23/32"	A	47 A 2805	11310	2.71	47 A 4486	11310	32	1.00	47 A 4277	51310	16	1.00
12-10	10	3/4"	A	47 A 2807	11410	3.38	47 A 4489	11410	25	1.00	......	.....	.....	.....
12-10	12-¼	29/32"	A	47 A 2808	11414	4.49	47 A 4490	11414	19	1.00	......	.....	.....	.....
22-18	4	17/32"	B	47 A 4205	13204	2.42	......	.....	.....	.....	......	.....	.....	.....
22-18	4-6	17/32"	B	47 A 2812	13206	2.42	47 A 4265	13206	36	1.00	47 A 4279	53206	16	1.00
22-18	8	41/64"	B	47 A 4206	13208	2.71	47 A 4266	13208	32	1.00	47 A 4280	53208	16	1.00
22-18	10	11/16"	B	47 A 4207	13210	2.71	......	.....	.....	.....	......	.....	.....	.....
16-14	4-6	49/64"	B	47 A 2810	13306	2.71	47 A 4492	13306	32	1.00	47 A 4282	53306	16	1.00
16-14	8	21/32"	B	47 A 4208	13308	2.71	......	.....	.....	.....	......	.....	.....	.....
16-14	10	49/64"	B	47 A 2811	13310	2.71	47 A 4493	13310	32	1.00	47 A 4304	53310	16	1.00
22-18	4-6	9/16"	B	47 A 2809	14206	2.42	47 A 4498	14206	36	1.00	47 A 4305	54206	16	1.00
22-18	8	5/8"	C	47 A 2819	15208	2.71	47 A 4499	15208	32	1.00	47 A 4306	55208	16	1.00
22-18	......	9/16"	E	47 A 2816	17202	2.71	47 A 4287	17202	32	1.00	47 A 4310	57202	16	1.00
16-14	......	9/16"	E	47 A 2817	17302	2.71	47 A 4288	17302	32	1.00	47 A 4311	57302	16	1.00
12-10	......	11/16"	E	47 A 2818	17402	3.38	......	.....	.....	.....	47 A 4312	57402	13	1.00
16-14	......	5/8"	F	47 A 2813	19301	2.10	......	.....	.....	.....	......	.....	.....	.....
22-18	......	17/32"	D	47 A 4213	18204	2.71	47 A 4294	18204	32	1.00	......	.....	.....	.....
16-14	......	23/32"	G	47 A 2820	18301	2.71	47 A 4295	18301	32	1.00	47 A 4313	58301	16	1.00
16-14	......	23/32"	H	47 A 2821	18302	2.71	47 A 4297	18302	32	1.00	47 A 4314	58302	13	1.00
16-14	......	9/16"	J	47 A 2822	18303	2.71	......	.....	.....	.....	......	.....	.....	.....
16-14	......	15/32"	K	47 A 2823	18304	2.71	47 A 4302	18304	32	1.00	......	.....	.....	.....

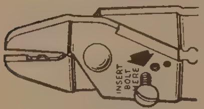
SERVICE KIT

Model 2195. Contains approx. 170 non-insulated terminals and crimping tool (at right). Tool cuts, strips wire and crimps terminals. Includes assortment of these single-grip terminals: 11205, 11206, 11210, 11305, 11306, 11310, 14206, 13306, 13310, 15208. In clear plastic box, 8¾x6x1¾", with individual compartments. Shpg. wt., 2 lbs.
47 A 4427.......................................8.95

CRIMPING TOOL

Model 1900. A quality tool designed for fast, effective crimping of non-insulated solderless terminals, above. Tool is furnished with three different crimping dies. Also quickly strips insulation from No. 22 to No. 10 size wires. Has durable steel jaws for heavy-duty use. Insulated plastic handles assure a comfortable grip at all times. Shpg. wt., 1 lb.
47 A 4233.......................................3.95

VACO 1963 CRIMPING TOOL



Easy handling all-purpose tool has crimping dies for insulated and non-insulated terminals. Cuts and strips wire. Wire cutter at tip for close work. Strips No. 10, 12, 14, 16, 18, 20, 22 wire. Shears six sizes of bolts: 10-32, 6-32, 5-40, 10-24, 8-32, and 4-40. Improved-action bolt slicing principle requires less hand pressure. Jumbo plastic handles.
47 C 4237. Shpg. wt., 2 lbs.......................................4.95

POMONA TEST ADAPTER HOLDER

Model 2898. Handy rack mounted holder keeps tube adapters and service tools neatly organized and readily accessible. The holder accommodates up to seven socket adapters of ⅞" in diameter or less, and six adapters of 1 9/32" diameter or less. Holes at both ends hold 12 service tools. Mounting holes provided for easy installation. Rolled steel with green enamel finish. 3½x11".
47 A 2228. Shpg. wt., 14 oz.......................................2.50

G-C ELECTROCRAFT "KLIPZON MINIPRODS"

Fit standard tip jacks. Clip to any terminal, lug, etc. Point pierces insulation. Solderless connection inside 1⅛" plastic handle. Specify *Black or †Red. Wt., 2 oz.

Stock No.	Type	EACH
47 A 1435 C	†33-138, *33-140	.55

JAMES MILLEN TUBE SOCKETS

Low-loss steatite 4 and 5-prong tube sockets for UHF use. For 866 rectifiers, transmitting tubes, etc. 1 11/16" mtg. ctr. Wt., 4 oz.

Stock No.	Type	Prongs	EACH
47 A 3200	33004	4	.85
47 A 3201	33005	5	.85

VECTOR SOCKET TURRETS

Terminal structures for single or multi-stage sub-assemblies. Mount on phenolic form; 7-pin miniature in ⅝" hole; 9-pin noval in ¾" hole. ½-in. diameter. Shpg. wt., 3 oz.

2" Turrets. 9 terminals in 2 rings, 1" apart.

Stock No.	Type	Socket	EACH
47 A 0217	8-M-9T	7-Pin Min.	.79
47 A 0233	8-N-9T	9-Pin Noval	.79

1½" Turrets. 6 terminals in one ring.

Stock No.	Type	Socket	EACH
47 A 0218	6-M-6T	7-Pin Min.	.72
47 A 0234	6-N-6T	9-Pin Noval	.72

Type S9 Shield Base. For use with miniature 9-pin sockets above. Fastens above chassis on socket mounting centers. Use with standard bayonet shield. Shpg. wt., 2 oz.
47 A 0236.......................................05

POMONA TEST LEAD HOLDERS

For test leads, patch cords, and cable assemblies. Items can be filed for instant selection within easy reach. Cold-rolled steel, with baked enamel finish. *For cable dia. 11x3½". 14 oz.

Stock No.	Type	Dia.	Color	EACH
47 A 2414	1508	.210"	Orange	2.95
47 A 2415	2708	.450"	Blue	2.95

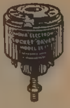
POMONA TUBE ADAPTERS

110-S Sylvania Type. For duo-decal equipment. No rewiring—plug in for 110° socket. Converts to 7FA basing. Shpg. wt., 4 oz.
47 A 0683.......................................1.95

110-R RCA Type. As above, but converts to 8HR basing. Shpg. wt., 5 oz.
47 A 0684.......................................1.95

ockets, Adapters, Test-Lead and Socket Holders

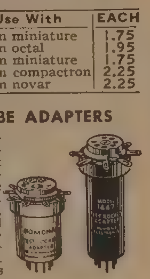
MONA SOCKET SAVERS



ube checkers and other equip- . Specially designed to reduce of tube sockets. Have berylli- opper tin alloy-plated contacts long-term dependability. Av. wt., 3 oz.

k No.	Type	Use With	EACH
0668	SS-7	7-pin miniature	1.75
0669	SS-8	8-pin octal	1.95
0678	SS-9	9-pin miniature	1.75
2240	SS-12	12-pin compactron	2.25
2416	1751	9-pin novar	2.25

TEST SOCKET TUBE ADAPTERS

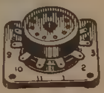


TVS-9 1447, 9

aits circuit measure- ts from top of chas- Plug-in test socket adapter has extend- est tabs which make sy to take readings. -7, TVS-8, TVS-9, -12 have mica-filled led design per MIL- 4. Breakdown volt- 1700 volts AC or DC. nufacturer's Types , 1449 and 2610 for with sockets having ive or telescoping tube shields. Breakdown volts AC or DC. Av. shpg. wt., 5 oz.

ck No.	Types	Pins	Description	EACH
A 0035	TVS-7	7	Miniature	1.85
A 0036	TVS-8	8	Octal	1.95
A 0037	TVS-9	9	Miniature	1.95
A 2211	TVS-12	12	Compactron	2.55
A 0038	1447	7	Miniature	1.95
A 0039	1449	9	Miniature	2.15
A 0045	2610	10	Decal	2.55
A 2417	2497	9	Magnoval	2.75
A 2286	1779	9	Novar	2.25

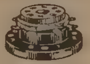
11-PIN RELAY SOCKET



del 2811. For industrial trol equipment requiring 11 contact configuration. ve chassis mounting. Sock- nd base molded of diallyl alate. Numbered socket nections. Heat treated yllium copper contacts. VRMS @ 10 amps. 2x2x.88″. Wt., 5 oz.

A 2420..............................2.75

RFACE-MOUNTING BREADBOARD SOCKETS

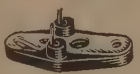


XS-8

minate double chassis design. ulated base. Circuits may be ed in enclosed unit. Base nections numbered. Phos- or-bronze spring contacts. . center-to-center mtg. holes. XS-7 and XS- nount in center or side, XS-9 on side. 1 oz

tock No.	Type	Pins	EACH
7 A 2215	XS-7	7	.65
7 A 2216	XS-8	8	.85
7 A 2217	XS-9	9	.75

EBY TO-3 TRANSISTOR SOCKET

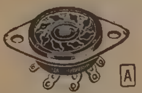


cket for power transis- s with TO-3 cases. One- ce design. High impact neral purpose bakelite. ntacts are cadmium- ted brass. Special de- n mounting plate and terminal for complete ctrical isolation of the base connection from chassis. Shpg. wt., 1 oz.

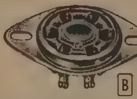
A 0262..............................**.44**

AMPHENOL

STANDARD TUBE SOCKETS



A



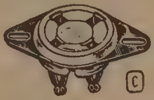
B

A **Type MIP.** Bakelite body with molded-in steel plate. *Require 1⅛″ hole; mounting centers, 1⁹⁄₃₂″. All others have 1⁵⁄₃₂″ mounting centers. †Requires 1⁹⁄₃₂″ hole; others 1⁵⁄₃₂″ hole. §Mica-filled bakelite. Av. shpg. wt., 4 oz.

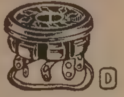
Stock No.	Type	Prongs	EACH
47 A 0024	77MIP4	4	.19
47 A 0025	77MIP5	5	.21
47 A 0026	77MIP6	6	.23
47 A 0027	77MIP7S	7 Small	.25
47 A 0029	†77MIP7L	7 Large	.28
47 A 0028	77MIP8	Octal	.21
47 A 0126	*88-8	Octal	.23
47 A 0030	*88-8X	Loktal	.33
47 A 0034	§77MIP8T	Octal	.25
47 A 0032	77MIP9	9	.25
47 A 0033	77MIP11	11	.29
47 A 0069	77MIP12	12	.30
47 A 0070	77MIP20	20	.67

B **Type RS.** High dielectric bakelite body with removable steel mounting plate. Designed for mounting in size 1¹¹⁄₆₄″ hole. Employ slotted mounting holes to fit centers from 1½ to 1⅞″. Av. shpg. wt., 4 oz.

Stock No.	Type	Prongs	EACH
47 A 0004	78RS4	4	.26
47 A 0005	78RS5	5	.28
47 A 0006	78RS6	6	.30
47 A 0008	78RS8	Octal	.29
47 A 0071	78RS11	11	.35



C



D

C **Type RSS.** Ultra-low-loss steatite replacement sockets. Ruggedly constructed. Adaptable to a wide variety of uses. Excellent for use in high-frequency transmitting equipment, etc. All are universal type; have removable mounting plate with slotted holes 1½ to 1⅞″. Mounting hole, 1¼″ except Type 49RSS7L, which requires 1²¹⁄₆₄″. Av. shpg. wt., 5 oz.

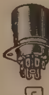
Stock No.	Type	Prongs	EACH
47 A 0074	49RSS4	4	.92
47 A 0075	49RSS5	5	.94
47 A 0079	49RSS7L	7 Large	1.69
47 A 0078	49RSS8	Octal	1.12

D **Type S.** High-dielectric molded bakelite body. Units are the same as Type RS, but without mounting plate. Mount quickly and easily without screws or rivets on panel or chassis up to .050″ thick with retainer ring supplied. Ruggedly built for trouble-free service. Socket may be positioned to line up contacts for convenient wiring. Require keyed 1¹¹⁄₆₄″ mounting hole. Av. shpg. wt., 4 oz.

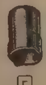
Stock No.	Type	Prongs	EACH
47 A 0054	78S4	4	.18
47 A 0055	78S5	5	.20
47 A 0056	78S6	6	.22
47 A 0057	78S7S	7 Small	.25
47 A 0058	78S8	Octal	.21
47 A 0062	78S9	9	.24
47 A 0060	78S8L	Loktal	.32
47 A 0072	78S11	11	.28

AMPHENOL

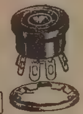
MINIATURE SOCKETS AND SHIELDS



E



F



G

Finest quality. The 147 series mount in ⅝″-diameter holes, and have ⅞″ mounting centers with ⅛″ holes. The 59 series mount in ¾″ holes, and have 1⅛″ mounting centers with .095″ holes (except Type 59-403, which is .125″). †Mica-filled. ‡Constructed of black bakelite. Av. shpg. wt., 5 oz.

E WITH TUBE SHIELD BASE

Stock No.	Type	Prongs	EACH
47 A 0194	‡147-905	7	.35
47 A 0175	†147-913	7	.34
47 A 0103	†59-403	9	.51
47 A 0176	†59-407	9	.41
47 A 0196	‡59-406	9	.40

F TUBE SHIELDS

Made of cold rolled cadmium-plated steel, 5 oz.

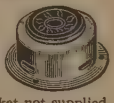
Stock No.	Type	Height	EACH
47 A 0189	5-408	1¹⁵⁄₁₆″	.25
47 A 0190	5-409	2⅝″	.31

G RETAINER RING SOCKETS

Mount in ⅝″ round or "D" shaped hole with retainer rings provided. May be used with Amphenol Series 91-MPM plugs. Made of black bakelite. Shpg. wt., 5 oz.

Stock No.	Type	Prongs	Pkg./5
47 A 0121	78-S3S	3	.61
47 A 0123	78-S4S	4	.79
47 A 0124	78-S5S	5	1.05
47 A 0128	78-S6S	6	1.10
47 A 0129	78-7P	7	1.47

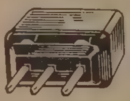
ACS SOCKET SHELL



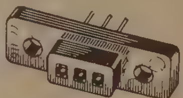
Type 23-1S. Lightweight aluminum shell for Type RSS, RS and S sockets (except Type 49RSS7L). Permits extension of sockets 1³⁄₁₆″ above or below chassis. Body dia., 1¹¹⁄₁₆″; 2³⁄₁₆″ base. For 1¾″ hole. Socket not supplied.

47 A 0127. Wt., 5 oz...................**.26**

SOCKETS FOR SCR'S



77-115



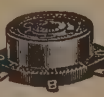
77-116

3-contact nylon receptacle. Nickel-silver contacts; nylon insulator. 500 V rms. 5 A. *Press-fits into rect. panel or chassis cut-out, .340/.330 x.164/.161″. †Has molded mtg. flange with two .125″ dia. mtg. holes on .625″ ctrs. Req. .325x.200″ cut-out. Wt., 2 oz.

Stock No.	Mfr's Type	PER PKG. OF 5			
		1-9	10-49	50-99	100-199
47 A 0093	*77-115	1.05	.88	.735	.63
47 A 0094	†77-116	1.03	.86	.725	.62

EBY SOCKETS AND ADAPTERS

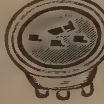
TUBE SOCKET



bove-Chassis Type 12- Octal socket. One- ece molded bakelite nstruction, for top-of- assis or panel mount- g. Mtg. ctrs. 1¹¹⁄₁₆″. Wt., oz.

7 A 0258....**Each .75**

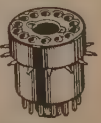
NUVISTOR SOCKETS



ype NU. For use with CA Nuvistor electron bes. NU-5 is a 5-pin type ith mica-filled bakelite electric. NU-7 (not illus.) a 7-pin saddle-mounting pe of bakelite. 1 oz.

7 A 0260. NU-5..Ea. .24
7 A 0289. NU-7..Ea. .90

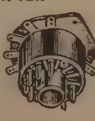
COLOR TV SOCKET ADAPTER



Type CA-1. Test point adapter for 21″ color TV picture tubes. Lets any serviceman test color CRT under actual conditions without removing tube or chassis from cabinet. Shpg. wt., 8 oz.

47 A 1384.......**Each 4.07**

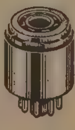
B & W SOCKET ADAPTER



Type 1000. Socket adapter for testing black-and-white TV duo-decal picture tubes. Easy to install or remove. External lugs permit check of all CRT pin voltages while set is operating. Wt., 3 oz.

47 A 0273.......**Each 1.11**

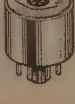
NOVAR ADAPTER



Type 9330. Keep your servicing equipment up-to-date by adding this adapter. Permits testing of the 6DW4 Novar tube on existing test equipment. Each adapter supplied with complete instructions. Shpg. wt., 3 oz.

47 A 1399...........**Each 1.80**

NUVISTOR ADAPTER

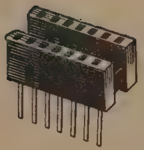


Type 9320. Permits testing of RCA 7-pin Nuvistor tubes using existing test equipment. Simply plug adapter into standard octal socket. Instruction sheet. Shpg. wt., 4 oz.

47 A 1359..........**Each 2.40**

Sockets and Experimenter Kits

CINCH-JONES SOCKETS



DUAL IN-LINE IC SOCKETS

D.I.P. SERIES. For 14 lead dual in-line integrated circuits with round or flat leads. High-stability precision package sockets for testing or production. Resistant to corrosive atmosphere, extremes of temperature and humidity. Bowed contacts provide high contact retention, permit easy insertion and removal. Contact resistance, .006 ohm max. Can be mounted on printed circuit boards designed for direct socket insertion, soldered in place; or chassis mounted. **Type 14-DIP** has electro-tin plated beryllium copper contacts with GP black phenolic body; **Type 14-DIP-1**, gold plated beryllium copper contacts with diallyl phthalate. 1 amp. 1800 V rms between adjacent contacts. Temp. range, −65° to +150°C. Size, .770x.424x31/32″ incl. lead. 1 oz.

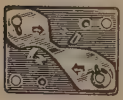
Stock No.	Mfr's Type	EACH 1-24	EACH 25-49
47 A 2152	14-DIP	.81	.65
47 A 2154	14-DIP-1	1.06	.85

6, 8 AND 10-ICS SOCKETS FOR INTEGRATED CIRCUITS

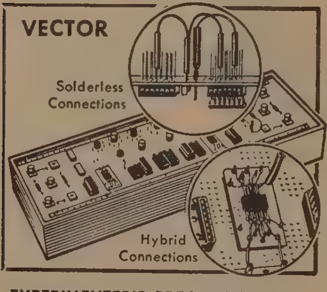
Socket designed for integrated circuits that mount in 6, 8, or 10-lead TO-5 cases. For printed circuit board mounting. Gives convenient means for installation, removal of integrated circuit. Diallyl phthalate. Shpg. wt., 1 oz.

Stock No.	Mfr's Type	No. of Contacts	EACH 1-24
47 A 0154	6-ICS	6	.55
47 A 0155	8-ICS	8	.66
47 A 0195	10-ICS	10	.73

POWER TRANSISTOR SOCKET



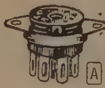
Type 2-TS1. Rugged socket designed especially for power transistors. Made of wax-impregnated XP bakelite. Has formed thread for 6-20 screw. With .104/.110″ dia. hole in CR plate. Wt., 2 oz.
47 A 0713 . . . . . . **Each .12**



EXPERIMENTER'S BREADBOARD KIT

Type 29X. Complete deluxe integrated circuit breadboarding kit provides fast, convenient means of interconnecting most configurations of integrated circuit packages for experimental uses. Fully compatible for use even in hybrid circuits. Top-quality mounting surface is of pre-punched Micro-Vectorbord with .042″ diameter holes on .100″ grid spacing; firmly supported by 2″ high Vector aluminum Frame-Loc rails.

Kit includes both 14 and 16-pin dual in-line integrated circuit sockets, plus circular lead pattern TO-5 integrated circuit sockets with adapters for mounting to rectangular grid. Contains Vector's T42-1 push-in Micro-Klips and K24C push-in pins for fast, easy connections. Wiring of component leads may be done with either polyurethane coated wire, solderable through insulation, or "Daisy Chain" patch cords for quick and easy solderless connections (both are included for your convenience). Flat bus strip is also supplied. Kit size, 4½x14x2″.
47 A 2733. Shpg. wt., 2 lbs. **59.75**

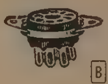


BOTTOM-MOUNTING MINIATURE SOCKETS

- Durable Molded Bakelite
- Cadmium Steel Saddle

Top-quality miniature sockets designed for mounting on bottom of chassis. Durably constructed of molded bakelite. Solder-coated brass contacts; cadmium plated steel saddle. **Type 7EB** mounts in ⅝″ hole, has ⅞″ mounting centers. **Type 9EB** mounts in ¾″ hole, has 1⅛″ mounting centers. Shpg. wt., 5 oz.

Stock No.	Type	Fig.	Description	EA.
47 A 1126	7EB	A	7-pin, bakelite	.12
47 A 1128	9EB	B	9-pin, bakelite	.14



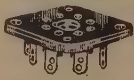
TOP-MOUNTING MINIATURE SOCKET

- Durable Molded Bakelit
- Cadmium Steel Saddle

Miniature sockets for top of chassis mounti Constructed of durable molded bakelite. S der-coated brass contacts assure easy sold ing. Cadmium plated steel saddle. **Type 7A** mounts in ⅝″ hole, has ⅞″ mounting cente **Type 9AB** mounts in ¾″ hole, has 1 mounting centers. Av. shpg. wt., 2 oz.

Stock No.	Type	Fig.	Description	E
47 A 1117	7AB1	A	7-pin, bakelite	.
47 A 1119	9AB	B	9-pin, bakelite	.

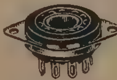
WAFER-TYPE TUBE SOCKETS



Laminated-bakelite tube sockets widely used in radio and TV sets, mobile units, etc. Have solder-coated brass contacts. *With center shield. **Pkg. of 5.** Shpg. wt., 4 oz.

Stock No.	Type	Centers	Pins	Pkg. of 5
47 A 0414	8W1	1 5/16″	8	.65
47 A 0415	8W2	1½″	8	.65
47 A 0416	9W1*	1⅛″	9 (min.)	.75

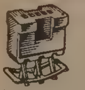
NOVAR TUBE SOCKET



Type 9NS-B. Accepts 9- novar tubes. Designed top of chassis mounti Meets or surpasses E standards. Molded fr dielectric black bakeli Has cadmium plated br contacts. Provides maximum fatigue streng and mating force with tube pins. Mounts 1⅛″ hole, has 1½″ mounting center. **P** **of 5.** Shpg. wt., 3 oz.
47 A 1356 . . . . **Pkg. of 5 for .**

ELCO PRINTED CIRCUIT AND TRANSISTOR SOCKETS

RETAINER MOUNT SOCKETS

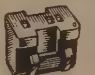


In-line sockets of mica-filled phenolic. For transistors and subminiature tubes. Contacts are gold flashed. Require retainers listed below. Shpg. wt., 3 oz. **Sold in Packages of 5.**

Stock No.	Type	Prongs	Pkg. of 5
47 A 1071	05-0799	3	77
47 A 1089	05-0803	4	96

Retainer Ring For Above Sockets. Designed for Type 05-0799 and 05-0803 transistor and miniature tube sockets above. 2 oz.
47 A 1096 . . . . **Pkg. of 5 for .10**

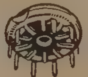
PRINTED CIRCUIT SOCKETS



Sub-miniature, mica-filled phenolic socket for use on printed circuit boards. For transistors and sub-miniature type tubes. All contacts gold flashed. Shpg. wt., 2 oz.

Stock No.	Type	Prongs	Pkg. of 5
47 A 5562	05-0786	3	.82

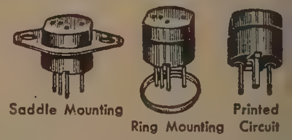
UHF PRINTED CIRCUIT STANDOFF SOCKETS

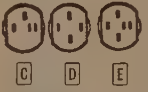


For 7 and 9-pin miniature tubes. Have low-loss, mica-filled insulators. Silver-plated, phosphor-bronze contacts. 4 oz.

Stock No.	Mfr's Type	Pins	Pkg. of 5
47 A 5521	05-0730-01	7	1.45
47 A 5526	05-0930-01	9	1.44

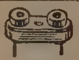
TRANSISTOR SOCKETS





Subminiature mic sockets eliminate lo and damage from d rect soldering of tra sistor pins. For 3-p transistors with in-lin pins or 3 and 4-pi transistors with pins c .200″ dia. circle of any configuration. Confor to **MIL-P-14.** *Requires ring listed. Wt., 2 o

Stock No.	Type	Fig.	Mtg.	Pkg.
47 A 1042	05-3301	C	Saddle	1.22
47 A 1043	05-3303	C	PC	1.00
47 A 1044	05-3304	C	*RM	.99
47 A 1045	05-3305	D	PC	1.00
47 A 1046	05-3307	C	*RM	1.19
47 A 1047	05-3308	D	PC	1.17
47 A 1048	05-3313	E	*RM	1.39
47 A 1049	65-00047202	Mtg. ring		.19

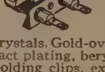


JAN CRYSTAL SOCKETS

*MIL TS0205C01. For .486″ pi spacing. .050″ pin dia. 2 oz.

Stock No.	Mfr's Type	Pkg. of 5
47 A 5542	*05-0210-01	.82
47 A 5543	05-0210-04	.91

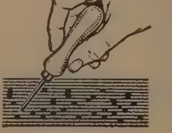
AUGAT CRYSTAL SOCKET ASSEMBLIES



Resist vibration. Take HC-6/U, HC-13/U crystals. Gold-over-nickel contact plating, beryllium copper holding clips, except *cadmium, steel. Clips cadmium plated. †Anti-rotation tab. Wt., 1 oz.

Stock No.	Mfr's Type	Descript.	Insul.	Contact Mater.	EA.
47 A 6149	8000-AG2	Horiz. or vert. mtg.	Teflon	Phosphor bronze	.7
47 A 6150	8000-AG6*		Nylon		.4
47 A 6151	8000-AG3†	Horiz. PC mtg.	Teflon	Phosphor bronze	.7
47 A 6152	8000-AG7*†		Nylon		.4
47 A 6154	8000-DG1†	PC mtg. rd. con. tails	Teflon	Beryllium copper	1.0
47 A 6155	8000-DG2		Nylon		1.0

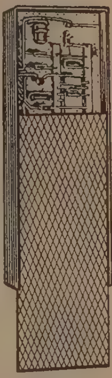
VERO MODEL BK-6 BOARD KIT



Basic circuit board kit with six Vero-boards and spot face cutter. Labora tories, experimenters, training institutes, hobbyists will find that thi new modular approach to circuit construction will save time, labor an offer valuable training in the most advanced method of circuitry. Wit Vero-boards you can use components to virtually write a schemati diagram on to the circuit board using the copper strips as supply line Lay parts on board with leads in holes, break strips with cutter, an solder. In minutes you have a finished circuit without clips, terminal wire or tools. Complete with instruction sheet. Shpg. wt., 2 lbs.
47 A 6001 . . . . 5.9

Vector Adapter and Breadboard Kits

VECTOR-PAK 28X HIGH-FREQUENCY CIRCUIT BREADBOARDING KIT



Vector-Pak 28X

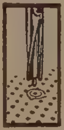
mplete "RF tight" kit for packaging circuits op-ting at VHF frequencies, and up through UHF nges where "plumbing" type lines are generally quired. Virtually duplicates circuit performance nieved by more expensive construction techniques. so permits making circuit and component changes ry quickly and easily. Circuit may be slipped out thout effort and replaced with another.

t consists of two parts: an 8½x3x2″ aluminum case th 2 slide-out shield sides for ready access to the closed copper-clad circuit board; and the circuit sembly hardware. Case provides an RF-tight, com-etely shielded enclosure. Circuit assembly hardware cludes: 1 pre-punched, copper-clad, epoxy glass ctorbord (8⅛x3x1⁄16″); 4 standoff terminal strips th 8 terminals; 2 standoff terminal strips with 12 rminals; 3 punched wall strips (.64x1.94″) with "L" ounting brackets, no terminals; 3 copper-clad nched strips for internal shielding (.90x2.85″); "Miniklip" terminals; 1 terminal inserting tool; pad cutter tool; 3 tetrode type transistor sockets, saddle; 3 right-angle-mounting tetrode type ansistor sockets; 2 power transistor sockets; 36 ounting screws (#0-80x5⁄16″) with nuts; 1 socket ench for nuts; 15 steel spacers; 10 epoxy glass ansistor mounting pads; 1 roll of #24 copper wire, nyl covered; 1 roll of tinned copper wire; 18 pieces plastic tubing for copper wire with 1⁄16″ O.D.; 50 elets (1⁄16x7⁄32″).

l circuit components mount close to copper ground ane by using terminal strips, sockets and hardware. ss case, below. Shpg. wt., 2 lbs.

A 6034. Complete 28X Kit..............**27.50**

A 6036. Type HF-20-86/31 Case Only. With 2 ding sides. Sturdy aluminum. Shpg. wt., 8 oz. 5.50

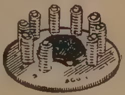


Pad Cutter Tool

BREADBOARD ACCESSORIES

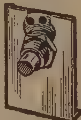
olderless Sockets. Reliable solderless "Spring-ps" are soldered to socket contacts. Up to 6 leads nnect to each "Springclip" for fast, reliable con-ction. Sockets mount on any "A" or "AA" pattern. ctorbord with furnished hardware. ¼ oz.

Stock No.	Mfr's Type	Description	EACH
A 5614	567-1C	8-Pin Octal	1.50
A 5615	568-1C	9-Pin Noval	1.65
A 5616	569-1C	7-Pin Miniature	1.35
A 5617	570B	4-Lead Transistor	1.20



568-1C

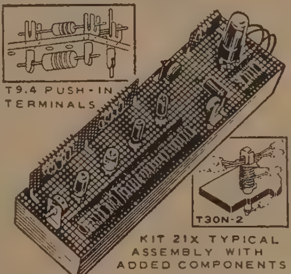
20 Pot and Switch Brackets. Aluminum brackets any "A" or "AA" Vectorbord. 2x1x¼″.
A 5618. Shpg. wt., 4 oz...... **Pkg. of 4 for .48**



8-20

us Stripping. Brass strips .2″ wide; .093″ holes, 65″ ctrs. Mount with T-9.4 terminals, T-30 clips #4 self-tap screws. ("A" or "AA" pattern).
A 5620. T 68 8″ Strips. ¼ oz. **Pkg. of 10 1.05**
A 5619. T 67,16″ Strips. ½ oz.. **Pkg. of 10 1.69**

EXPERIMENTERS' CHASSIS KITS



T9.4 PUSH-IN TERMINALS

T30N-2

KIT 21X TYPICAL ASSEMBLY WITH ADDED COMPONENTS

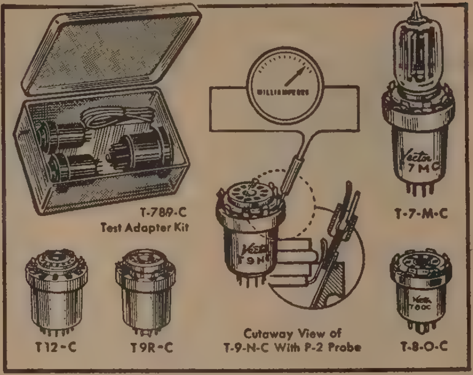
esigned for rapid setup of perimental circuits with mple hand tools. For tube transistor circuits. In-ude push-in terminals, per-rated XXXP phenolic ecks, aluminum supports, 30 N 2 installation tool, ecessary mounting hard-are. Terminals: T9.4 pplied with insert tool ush-in type requires sol-ering); T 30N2 "Spring-ip" with winged washer r easy push-down, holds o to 6 wires tightly, with-ut soldering, crimping, ending. New patchcords ip in between spring coils solderless terminals and eed wiring. Type 20X has deck; Type 21X has 1 rge and 2 small decks, 8 atchcords; Type 22X has large and 2 small decks, 6 patchcords; Type 22XA has 1 large deck lus 2 smaller decks, 14 patchcords; Type 25X has 1 large and 2 small ecks, 10 patchcords, wood, aluminum parts. Shpg. wts.: 20X, 1 lb.; X. 2¾ lbs; 22X, 1¾ lbs.; 22XA and 25X, 3½ lbs.

Stock No.	Type	L. Deck	Small Deck	EACH
A 0906	20X	4¾x8½″	1⅜x1²⁹⁄₃₂x³⁄₃₂″; 1²⁹⁄₃₂x8½x³⁄₃₂″	6.75
A 0907	21X	4¾x17″	1⅜x1²⁹⁄₃₂x³⁄₃₂″; 1²⁹⁄₃₂x8½x³⁄₃₂″	16.75
A 0908	22X	4¾x8½″	1⅜x1²⁹⁄₃₂x³⁄₃₂″; 1²⁹⁄₃₂x8½x³⁄₃₂″	11.50
A 0945	22XA	8½x17″	1⅜x1²⁹⁄₃₂x³⁄₃₂″; 1²⁹⁄₃₂x8½x³⁄₃₂″	28.00
A 0909	25X	8½x17″	1⅜x1²⁹⁄₃₂x³⁄₃₂″; 1²⁹⁄₃₂x8½x³⁄₃₂″	21.45

KITS ABOVE INCLUDE THE FOLLOWING

Mfr's Type	Terminals			Patch-cords	Tube Sockets			Trans.Skts.	
	T 9.4	T30 N2	T32A		7P	8P	9P	3, 4P	Power
20X	75	0	0	0	3	2	3	0	0
21X	100	50	0	8	3	2	3	4	2
22X	75	20	0	6	3	0	0	6	2
2XA	100	100	18	14	0	0	0	6	2
25X	100	90	10	13	3	2	2	4	2

CURRENT/VOLTAGE-TEST TUBE-SOCKET ADAPTERS



Type T-7-M-C Socket Test Adapter. Fits shield base for 7-pin miniature tube socket. Lets you make accurate voltage, current and waveform measurements from top-side of chassis. Tabs are a pair of spring contacts which separate electrically when optional Dual Side P-2 Probe (see table below) is inserted. Probe "breaks" circuit, and gives current or voltage reading to your meter. Electrostatic capacity approx. 1pF. Flash-over voltage, over 1500 VDC. Has phenolic shell, socket and plug. Length, less prongs, 1.47″. Shpg. wt., ¾ oz.

T-8-O-C Socket Test Adapter. Fits 8-pin octal tube clamps. Same specs as T-7-M-C test adapter except lgth. less prongs is 1.5″. Wt., 1½ oz.

T-9-N-C Socket Test Adapter. Fits into shield base for 9-pin miniature types. Has same specs as T-7-M-C test adapter. Shpg. wt., ¾ oz.

Type T-9-R-C Socket Test Adapter. Fits 9-pin Novar socket. Has same specs as T-7-M-C except length less prongs, 1.56″. Shpg. wt., 2 oz.

Type T-12-C Socket Test Adapter. Fits 12-pin Compactron socket. Has same specs as T-7-M-C except length less prongs, 1.56″. Wt., 2 oz.

Stock No.	Type	Socket	Body Dia.	Skirt Dia.	Oz.	EACH
47 A 6035	T-7-M-C	7-Pin Min.	.75″	1.03″	¾	2.53
47 A 6037	T-8-O-C	8-Pin Oct.	1.26″	1.56″	1½	3.19
47 A 6038	T-9-N-C	9-Pin Min.	.87″	1.16″	¾	2.70
47 A 4528	T-9-R-C	9-Pin Nov.	1.26″	1.56″	2	3.65
47 A 4527	T-12-C	12-Pin Comp.	1.26″	1.56″	2	3.85
47 A 6040	P-2	Dual Sided Plug-in Probe			½	.79

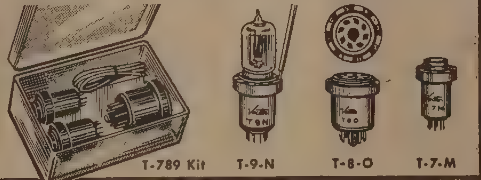
TYPE T-789-C COMPLETE 3-SOCKET ADAPTER KIT

Has T-7-M-C, T-8-O-C, T-9-N-C adapters, P-2 Probe, plastic case.
47 A 6039. Shpg. wt., 6 oz..................................9.74

TYPE T-912-C COMPLETE 2-SOCKET ADAPTER KIT

Has T-9-R-C, T-12-C adapters, P 2 probe, plastic case.
47 A 1902. Shpg. wt., 6 oz..................................8.29

VOLTAGE-TEST TUBE-SOCKET ADAPTERS and KIT



Type T-7-M Socket Adapter. Similar to T-7-M-C above, but without current-measuring feature. Fits 7-pin miniature tube socket. Tabs on adapter designed to grip optional P-1 Probe, listed below. Flashover voltage in excess of 1500 VDC. Length, less prongs, 1.5″. Wt., ½ oz.

Type T-8-O Socket Adapter. Fits standard 8-pin octal tube clamps. Has same specifications as T-7-M above. Shpg. wt., ¾ oz.

Type T-9-N Socket Adapter. Fits into shield base for 9-pin miniature types. Has same specifications as T-7-M above. Shpg. wt., ½ oz.

Stock No.	Mfr's Type	Socket	Shell Body Dia.	Shell Skirt Dia.	EACH
47 A 0040	T-7-M	7-Pin Min.	.75″	1.03″	1.65
47 A 0041	T-8-O	8-Pin Oct.	1.25″	1.56″	1.75
47 A 0042	T-9-N	9-Pin Min.	.87″	1.16″	1.85
47 A 0044	P-1	Plug-in Probe			.52

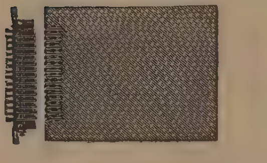
TYPE T-789 COMPLETE 3-SOCKET KIT

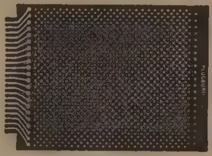
Includes all 3 of the voltage-test tube-socket adapters described above—Types T-7-M, T-8-O and T-9-N—plus a handy P-1 probe. Comes in sturdy plastic case. Shpg. wt., 6 oz.
47 A 0210...5.90

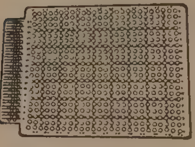
Terminal Boards, Terminals, and Knobs

VECTOR "PLUGBORDS," RECEPTACLES, "VECTORBORD" AND TERMINALS

"PLUGBORDS" AND RECEPTACLES





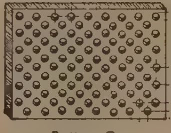


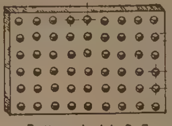
"Plugbords." Manufactured of sturdy 1/16" thick epoxy paper, EXXXP per **MIL-P-22324** except * are 1/16" epoxy glass, Grade G-10 per **MIL-P-18177.** All plugboards except Type 2536WE have grid of .062" holes on alternate 0.1" centers. Type 2536WE has .093" holes on 0.2" grid and number matrix for easy hole identification. Type 838PWE has an etched copper pad network. All contacts are on .156" centers and .072" wide except § .090" wide. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Size	No. of Contacts	EACH
47 A 0928	812	4½x6½"	16	2.98
47 A 5606	812WE*	4½x6½"	16	3.53
47 A 0927	837	3x4½"	12	2.33
47 A 5607	837WE	3x4½"	12	2.58
47 A 5609	838A §	4½x6½"	22	2.81
47 A 5611	838PWE*§	4½x6½"	22	3.65
47 A 5608	848WE*	4½x6½"	35	6.09
47 A 6022	838§	4½x6½"	43	3.89
47 A 6023	2536WE*	4½x6½"	35	6.97

Receptacles. All types come equipped with solder and taper tab leads. Av. shpg. wt., 3 oz.

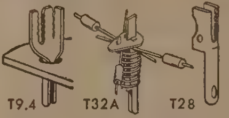
Stock No.	Mfr's Type	No. of Contacts	For	EACH
47 A 6024	R612-1	12	837, 837WE	1.80
47 A 6026	R616-1	16	812, 812WE	2.24
47 A 5612	R644	44	838PWE, 838 and A	2.62
47 A 5635	R635	35	848WE, 2536WE	4.91


Pattern G


Pattern A, AA, B, F

"Vectorbord." For breadboard or production applications. No suffix letters indicate boards are phenolic, XXXP per **MIL-P-3115B;** Suffix EP indicates epoxy paper, EXXXP per **MIL-P-22324**, suffix WE indicates epoxy glass, G-10 per **MIL-P-18177.** Patterns A, B, F, G are 1/16" thick; AA is 3/32" thick. Patterns A and AA have .093" holes on .265" grid; B has .062" holes on .180" grid; G has .062" holes on staggered 0.1" grid; F has .062" holes on .2" grid. 17" long except *8½". Push-in T9.4 and T32A terminals, below, fit Pattern A and AA. T-28 fit B, F and G. Av. wt., 7 oz.

Stock No.	Mfr's Type	Width	Pattern	No. Holes	EACH
47 A 0916	85G24EP	4 13/16"	G	(85x23)x2	2.14
47 A 0917	32AA18	4 13/16"	AA	32x18	.87
47 A 0918	64A18	4 13/16"	A	64x18	1.30
47 A 0919	64AA18	4 13/16"	AA	64x18	1.66
47 A 0926	32AA9*	2 7/16"	AA	32x9	.62
47 A 5601	64A18WE	4 13/16"	A	64x18	3.87
47 A 5604	85G24WE	4 13/16"	G	(85x23)x2	3.96
47 A 5605	85F24EP	4 13/16"	F	85x23	2.14
47 A 6008	64AA18EP	4 13/16"	AA	64x18	2.84
47 A 6009	42G24WE*	4 13/16"	G	(42x24)x2	1.97
47 A 6005	45B30*	5⅝"	B	45x30	.87
47 A 6006	90B30	5⅝"	B	90x30	1.68
47 A 6007	64AA32	8½"	AA	64x82	2.86



PUSH-IN TERMINALS

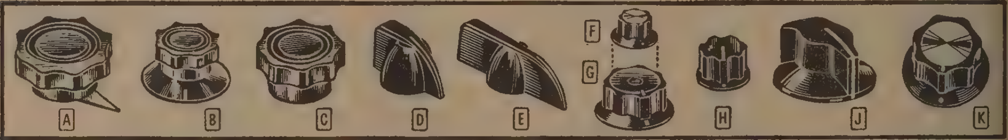
Hold multiple leads, need no staking. Type T9.4 have slots for small and large leads. Type T32A spring clips hold up to six .05"-dia wires without soldering. T28 terminals are designed for subminiature components. Shpg. wt., per pkg. of 100, 3 oz.

Mfr's Type	Fits Holes	Stock No.	PER PKG. OF 100	Stock No.	PER PKG. OF 1000
T9.4	.093"	47 A 0878	1.44	47 A 1437	10.18
T28	.062"	47 A 0879	1.61	47 A 1438	11.44
T32A	.093"	47 A 6046	10.30	47 A 6047	78.00

Insertion Tools. Simplify insertion of push-in terminals. Av. wt., 2 oz.

47 A 0601. Type P-91. For T28 terminals	.50
47 A 6004. Type P-136. For T32A terminals	1.20
47 A 0607. Type P-122. For T9.4 terminals	1.40

KURZ-KASCH MOLDED KNOBS



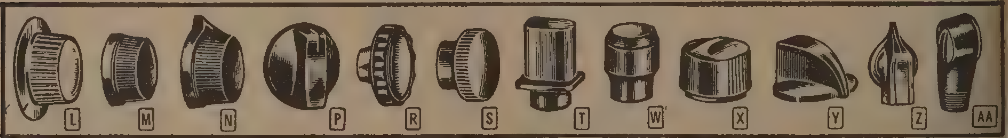
Figs. A-C are quality fluted knobs. Functionally designed—add custom appearance to Amateur and experimental equipment. Durable, high-gloss bakelite. †Have metal inserts with setscrew to fit flatted or round ¼" shafts. Av. shpg. wt., 4 oz. Fig. D-K are handsomely styled plastic knobs for replacement or original equipment use. *Black base, red top with inlay. §Aluminum inlay. All other knobs are equipped with setscrews to permit use with either round or flatted ¼" shafts. Av. shpg. wt., 3 oz.

Stock No.	Fig.	Size	Color	EACH
47 A 3414	C	1⅛"	Black	.48
47 A 3415	A	1⅝"	Black	.52
47 A 3416	A	2⅜"	Black	.71
47 A 3417	C	1⅛	Black	.25
47 A 3418	C	1⅝	Black	.34
47 A 3419	C	2⅜"	Black	.52
47 A 3420	B	1½"	Black	.68

Stock No.	Fig.	Size	Color	EACH
47 A 3421	B	2 1/16"	Black	.71
47 A 3398	D	1¼"	Black	.12
47 A 3399	D	1¼"	Red	.12
47 A 3400	†D	1¼"	Black	.18
47 A 3401	E	2"	Black	.19
47 A 3402	E	2"	Red	.31
47 A 3403	†E	2"	Black	.30

Stock No.	Fig.	Size	Color	EACH
47 A 3406	F	¾"	Black	.18
47 A 3404	F	1¼"	Black	.19
47 A 3405	*F & G	¾"-1¼"	R & B	.58
47 A 3409	H	¾"	Black	.44
47 A 3410	J	1¼"	Black	.48
47 A 3411	§K	1¼"	Black	.40

HARRY DAVIES MOLDED KNOBS



Handsomely designed molded plastic knobs for replacement or original equipment use. Knobs are ideal for volume and tone controls on television receivers, radios, high fidelity systems, test instruments, almost all types of electronic equipment. Fig. M and N are for small radios. *For knurled shafts; †screws onto 8-32 threaded shaft; #screws onto 6-32 threaded shafts; ‡self-locating friction fit for flat wire shafts; all others equipped with set-screws to permit use with either round or flatted ¼" shafts. Shpg. wt., 3 oz.

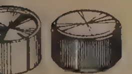
Stock No.	Fig.	Size	Color	EACH
47 A 4127	L	1½"	Black	.16
47 A 4129	L	29/32"	Black	.17
47 A 4136	*M	11/16"	Black	.06
47 A 4134	M	11/16"	Black	.10
47 A 4137	M	1"	Black	.14
47 A 4138	N	11/16"	Black	.10

Stock No.	Fig.	Size	Color	EACH
47 A 4140	N	1"	Black	.15
47 A 4141	P	1⅛"	Black	.13
47 A 4142	P	1⅛"	Red	.13
47 A 4144	R	⅞"	Black	.14
47 A 4145	R	1¾"	Black	.20
47 A 4146	†S	¾"	Black	.09

Stock No.	Fig.	Size	Color	EACH
47 A 4166	‡T	5/64"-½"	Black	.08
47 A 4168	#W	31/64"-½"	Black	.07
47 A 4170	X	¾"	Black	.13
47 A 4171	Y	1 3/16"	Black	.12
47 A 4175	Z	1¼"	Black	.13
47 A 4184	AA	1⅝"	Black	.22

Dials and Accessories; Knobs Couplings

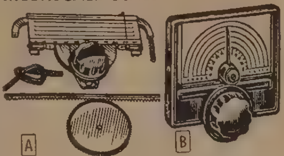
ALCO ANODIZED ALUMINUM KNOBS



Smartly-styled, modern anodized aluminum control knobs enhance the appearance of any type of equipment. An excellent choice for replacement use, or for incorporation in original equipment design. Type KHF has unique saw-cut indicator for precise positioning. Available in gold or clear finish. Type KN has hairline indicator and straight knurls for firm, positive ping. Choice of natural aluminum body and black top, or black lized body with natural top. Av. shpg. wt., 1 oz.

tock No.	Mfr's Type	Color	Dia.	Shaft Size	EACH
A 6780 C	KHF-500	Specify gold or clear.	½"	¼"	.45
A 6782 C	KHF-700	Specify gold or clear.	¾"	¼"	.50
A 6784 C	KHF-900	Specify gold or clear.	15/16"	½"	.55
A 6786 C	KHF-1250	Specify gold or clear.	1¼"	¼"	.65
A 6675	KN-500AB	Aluminum body, black top.	½"	¼"	.75
A 6676	KN-500BA	Black body, aluminum top.	½"	¼"	.75
A 6677	KN-700AB	Aluminum body, black top.	¾"	¼"	.80
A 6678	KN-700BA	Black body, aluminum top.	¾"	¼"	.80

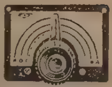
MILLEN MULTISCALE DIALS



Type 10037 No-String Slide-Rule Dial. Versa- dial features positive ter travel and resettabili- Has velvet-smooth friction e with 180° rotation of the out shaft. Teflon bearings re smooth, easy operation life—never need lubrica- . Shaft has anti-backlash ble coupling. Drive Ratio, . Dial has 0-100 logging e, plus blank scales for added convenience. 5¾x9x13/16" behind panel. el, 7⅝x2⅝".
A 3236 Shpg. wt., 6 oz. 13.05

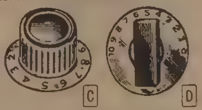
Type 10035 Multiscale Dial. Deluxe illuminated slide-rule dial with self-contained mechanism. Drive Ratio, 12:1. Has one 0-100 ging scale and four blank scales. 8½x6½". Black finish.
A 3241 Shpg. wt., 6 oz. 10.54

NATIONAL TYPE MCN VERNIER DIAL



Small vernier dial with 5:1 drive: Perfect for mobile gear and small converters and tuners. Mechanism extends ¼" below frame. Offers three blank calibrating scales and 0-100 logging scale. Black wrinkle finish. With hardware, and hub for ¼" shafts. 2¾" high; 3⅞" wide. Shpg. wt., 10 oz.
47 A 2171 .... 7.20

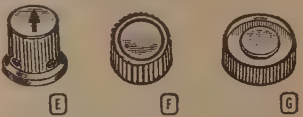
NATIONAL CALIBRATED KNOBS



For any equipment. Types R, HRS-3, and HRS-5 are numbered 0-10 over arcs shown in scale column of table below. HRS-4 has single. etched center line. All fit ¼" shafts. HRS types of molded Tenite with chromed bevel dial; Type R of molded bakelite. flat aluminum dial. Av. shpg. wt., 2 oz.

Stock No.	Type No.	Fig.	Color	Scale	Dia.	EACH
47 A 2106	HRS-3	C	Black	0-10; 300°	1 7/16"	.66
47 A 2107	HRS-3	C	Gray	0-10; 300°	1 7/16"	.66
47 A 2125	HRS-4	C	Black	1-line	1 7/16"	.66
47 A 2126	HRS-4	C	Gray	1-line	1 7/16"	.66
47 A 2128	HRS-5	C	Black	0-10; 180°	1 7/16"	.66
47 A 2136	R	D	Black	0-10; 180°	1⅝"	.69

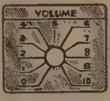
NATIONAL HR SERIES KNOBS



A matched line for industrial and consumer use. Made of molded Tenite in a variety of styles and sizes. All knobs in this series share a family resemblance, giving job a unitized appearance.

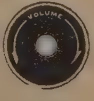
Stock No.	Type	Fig.	Description	Wt.	EA.
47 A 2180	HRM	E	Satin chrome finish. ⅝" dia.	2 oz.	.96
47 A 2176	HR	F	Black; white dot. 15/16" dia.	2 oz.	.39
47 A 2177	HR	F	Gray; same as above	2 oz.	.39
47 A 2178	HRT	G	Black; chrome insert. 2⅛" dia.	3 oz.	1.04
47 A 2185	HRT-M	G	Same as above, but 1½" dia.	2 oz.	.58

WALDOM DIAL PLATES



uare. Attractive ano- ed aluminum dial plates h black scales. Use with " bar knob. Gives custom to hi-fi and P.A. amps, amps, recorders, etc. e, 2 3/16x2⅝", with 13/32" ter hole. Wt., 2 oz.

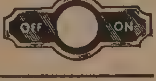
ock No.	Type	Description	EACH
A 3121	426	Volume, 0-10	.41
A 3130	410	No title, 0-10	.41



und. Etched aluminum scale h black background. 1¾" . Type 25 has clockwise ar- labeled "Volume." One-hole g. For amplifiers, modulators, onos, etc. Use with 1¼" bar obs. 13/32" center-hole. Av. g. wt., 2 oz.

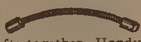
ock No.	Type	Description	EACH
A 3131	25	Volume	.34
A 3135	569	0-100, 180°	.34
A 3136	905	0-100, 270°	.34

WALDOM SWITCH PLATE



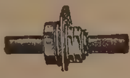
ched aluminum with ck background. 1 1/16x 16". Shpg. wt., 2 oz.
A 3139 .... .20

H. H. SMITH FLEXIBLE SHAFTS



n-rusting phosphor- onze flexible shafts h ¼" hubs. Ideal for nnecting out-of-line shafts together. Handy cessory for Amateurs, labs, etc. Permit up to degrees angular control. Av. wt., 2 oz.
A 4088. Type 151. Length, 3" .... .60
A 4089. Type 152. Length, 6" .... .65

MITH PANEL BEARING ASSEMBLY



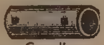
r use with couplings at ht on panels up to 7/16" ck mounted away from ntrols. Brass bearing s stub for knob with ¼" aft on other side. Av. pg. wt., 7 oz.
A 4090. Overall length, 3". **Pkg. of 2/ .70**
A 4091. Overall length, 6". **Pkg. of 2/1.00**
A 4092. Bearing only...... **Pkg. of 5/ .75**

WALSCO DIAL CORD SPOOLS

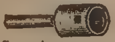
Dial cords with nylon sleeves over fiberglas or linen cores. Ideal for replacement use. Prestretched to prevent stretching and slipping; maintain proper tension. Provide long life and smooth, easy tuning. Av. shpg. wt., 4 oz.

Stock No.	Mfr's Type	Dia.	Strgth. (Lbs.)	Lgth. (Ft.)	EA.
47 A 3194	652-Med.	.040"	35	25	.83
47 A 3198	656-Thin	.025"	15	25	.83
47 A 3199	654-Std.	.032"	20	25	.83
47 A 3197	652-Med.	.040"	35	100	2.59

SMITH SHAFT FITTINGS



Coupling

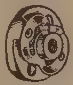


Extender

Couplings for extending shafts, or for ganging single units, even when shafts are not same diameter. Extenders for decreasing or increasing shaft diameter and for extending shaft length. 1st size is opening: 2nd, shaft dia. Extenders, ⅝" shaft length; overall, 1⅛". Av. wt., 4 oz. *brass; †insulated.

Stock No.	Type	Size	EACH
47 A 1105	Coupling*	¼ to ¼"	.22
47 A 1108	Extender*	¼ to ¼"	.30
47 A 1109	Extender*	⅜ to ¼"	.35
47 A 1111	Coupling†	¼ to ¼"	.22
47 A 1113	Extender†	¼ to ¼"	.35

HAMMARLUND COUPLINGS

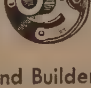


Type FC-46S. Sturdy, slip-proof insulated flexible coupling. 4 set screws (2 on each side). For ¼"-dia. shafts. Shaft clearance, 5/32". Flash voltage, 5000 V. Size 1¼x13/16". Shpg. wt., 3 oz.
47 A 2403 .... 1.50

Type FNC-46S. As above, but non-insulated type. Nickel-plated brass ring. 1¼" dia.x23/32".
47 A 2404. Shpg. wt., 3 oz. 1.20

ACCURATE ELECTRIC

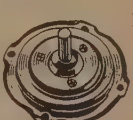
INSULATED COUPLING



10158. Connects shafts to switches, controls, etc. Bakelite insulation. For ¼" shafts. With setscrews. Shpg. wt., 2 oz.
47 A 2405 .... .53

NATIONAL TYPE AVD-250

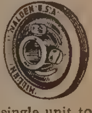
PLANETARY DIAL DRIVE



Popular velvet-vernier planetary dial-drive mechanism with 5:1 reduction ratio. Famous for smoothness, accuracy and ease of operation. Has been used successfully in many types of equipment. Offers durability as well as fine performance, plus years of dependable service. Provides output torque of 1-3 inch-pounds. Designed for convenient front-of-panel mounting with four 5/32" holes on 2 5/16" mounting centers. For use with ¼" control shafts. Output hub is uninsulated. Overall length, 1 11/16". Overall Diameter, 2 9/16". Drive Shaft Diameter, ¼". Shpg. wt., 8 oz.
47 A 2025 .... 2.63

MILLEN COMPONENTS

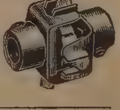
FLEXIBLE COUPLINGS



Provide high flexibility, no backlash, high breakdown voltages, small diameter, accurate alignment. 39001 insulated, 39006 slide-action type for eccentric shaft motion. 39005 (high torque) like 39001 but not insulated. 39016 (illus) molded as single unit to resist shock. All for ¼" shafts. Shpg. wt., 2 oz.

Stock No.	Type	Description	EA.
47 A 3208	39001	Universal joint	.75
47 A 3212	39005	Universal joint	.75
47 A 3213	39006	Slide action	.75
47 A 3214	39016	Barrier	.75

MINIATURIZED COUPLINGS

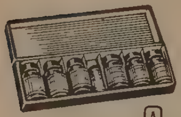


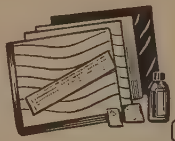
For limited space use. Type M006 (illus.) is universal joint style made of nickel-plated brass with steatite ceramic insulation and spring fingers. Type 39003 is solid brass for ¼" shafts; M006 for ⅛" shafts. Av. shpg. wt., 2 oz.

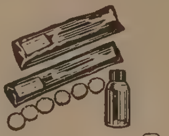
Stock No.	Type	Description	EA.
47 A 3205	M006	Univ. joint coupling	1.05
47 A 3207	39003	Solid brass coupling	.30

Graphic Art, Printed Circuit and Lettering Kits

KEPRO NAMEPLATE, PRINTED CIRCUIT, PHOTO REVERSING KITS







Simple Two-Step Photo Reversing Process

A **P-101A Etched Circuit Kit.** Uses photo-engraving process to produce professional-quality etched circuits. With 3 XXXP phenolic boards (two 3x6", one 3x3"); 2 sheets mechanical negatives; solutions and accessories. Shpg. wt., 3 lbs.
47 A 1036........................5.85

47 A 1037. P-101A-G Kit. As above, but with G-10 glass epoxy boards. 3 lbs........7.40

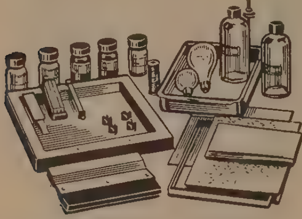
S-101A Standard Etched Circuit Kit. Resist applied by marking pen or tape to copper. Tape, pen and 3 panels 3x6" XXXP.
47 A 1100. Shpg. wt., 2 lbs..........3.95

47 A 1101. S-101A-G Standard Kit. As above, but glass epoxy boards. 2 lbs..........5.25

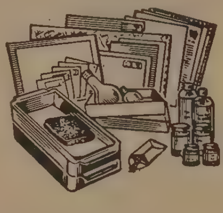
B **NP-303A Enamel Nameplate Kit.** Photo process makes aluminum letters on blue enamel. With two 8x10x.007" plates; solutions, accessories.
47 A 1206. Shpg. wt., 1 lb..........7.25

NP-404 Anodized Aluminum Nameplate Kit. Aluminum letters on anodized black background. Three 3x6x.025" plates, solutions.
47 A 1207. Shpg. wt., 1½ lbs........6.55

C **FK-701 Photo Reversing Kit.** Makes line negatives, positives from taped or ink art; reverses existing negatives, positives. Two 10x24" reversing films, chemicals.
47 A 0160. Shpg. wt., 1½ lbs........7.20
47 A 0161. Extra Reversing Film. 2 oz...3.00
47 A 0162. Extra RFD-2 Developers. 2 oz. .60



KEPRO KITS FOR MAKING ETCHED CIRCUITS



COMPLETE SILK SCREEN KIT

Model SC-601A. Everything for making three 7x9" silk screens. Produces lacquer resistant, film-type photo stencils for screen printing of etched circuit boards, nameplates, instrument panels, or decorative printing. With 10x12" screen frame with silk; two 14x16" screen silks; package of three 8x10" stencil film; #2 photo flood lamp; 8½x11½" print frame; complete set of chemicals; tray, thermometer and ink.
47 A 1033 U. Shpg. wt., 13 lbs......35.00

PRINTED-CIRCUIT LAB KIT

Model L-505A. For PC boards to 70 sq. in. from prototypes to short production runs. Has: 15 asst'd. photo-sensitized, copper-clad phenolic XXXP boards; trays; safelight; photoflood lamp; printing frame; PL-2A Layout Kit; mechanical negative; solutions; pen, eyelets, cleaning pad.
47 A 1034 U. Wt., 18¾ lbs..........34.75
L-505A-G. As above, but with G-10 glass epoxy circuit boards. 19½ lbs.
47 A 1035 U........................42.95

KEPRO AND BRADY PHOTO LAYOUT SUPPLIES

*Brady, black, self-sticking strips for PC drafting. Photographs opaque without highlights.

Stock No.	Mfr's Type	Description	EACH
47 A 1025	MN-1212	12x12" Mechanical Negative	1.25
47 A 0166	TC125-031	Terminal Circles ⅛" O.D. (112 per card)	.55
47 A 0200	TC250-062	Terminal Circles ¼" O.D. (96 per card)	.55
47 A 0263	TC500-125	Terminal Circles ½" O.D. (42 per card)	.55
47 A 1027	AT-810	Pressure-Sensitive Letters and Numerals on transparent base. (3 sizes, 4 fonts). 4 oz.	2.50
47 A 1752	*CSR062	Connector strips 1/16" wide (Pkg./5; 18 yds. per roll)	4.00
47 A 1758	*CSR125	Connector strips ⅛" wide (Pkg./5; 18 yds. per roll)	4.00
47 A 1773	*CSR250	Connector strips ¼" wide (Pkg./2; 18 yds. per roll)	1.80

KEPRO PC KIT SUPPLIES

Replacement materials for Kepro PC kits, or for those already engaged in PC work. Type S-2 and P-2 have foil on both sides, S-1 and P-1, one side only. S is photosensitized coated. 5 sheets per package.

G-10 1/16" GLASS EPOXY SHEETS

Av. shpg. wt., ½ lb. per pkg.

Stock No.	Type	Description	Size	PKG.
47 A 0930	S1-335G	Light sens.	3x3"	3.70
47 A 0932	S1-365G	Light sens.	3x6"	6.65
47 A 1007	S2-335G	Light sens.	3x3"	4.55
47 A 1012	S2-365G	Light sens.	3x6"	8.15

XXXP 1/16" PHENOLIC SHEETS

Av. shpg. wt., ½ lb. per pkg.

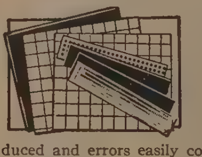
47 A 0594	P1-365PB	Perf. Unsen.	3x6"	2.40
47 A 0599	P2-365	Perf. Unsen.	3x6"	2.55
47 A 0679	S1-335	Light sens.	3x3"	2.15
47 A 0681	S1-365	Light sens.	3x6"	3.55
47 A 0731	S2-365	Light sens.	3x6"	5.05

CHEMICALS

Shpg. wt., 6 oz. except pints, 3 lbs.

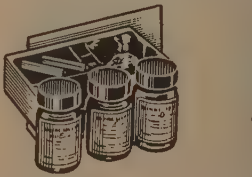
47 A 1102	RMP-700	Resist pen	2 oz.	.75
47 A 1104	R-2	Paint resist	2 oz.	.60
47 A 1106	T-2	Resist thin	2 oz.	.50
47 A 1107	D-1PT	Developing solution	Pint	1.15
47 A 1159	E-1PT	Etching solution	Pint	.85

KEPRO PHOTO LAYOUT KIT



PL-2A. Eliminates inking and lettering through use of mechanical negative and pressure-sensitive characters. Layout time is reduced and errors easily corrected. Kit includes tape dots, two tape strips, letters and numerals, acetate sheet, mechanical negative, layout paper, and instructions.
47 A 1016. Shpg. wt., 1 lb..........3.95

MICRO-CIRCUITS S-21 KIT

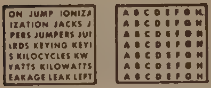


Make Electronic Printed Circuits With This Complete Kit

All necessary materials to paint electronic circuits. Comes complete with brush, conducting paint, resistance paints, lacquer, solvent and accessories.
47 A 0164. Shpg. wt., 1¾ lbs.......23.11

RUSSELL INDUSTRIES DRY TRANSFER LETTERING

(Each "Markit" has 27 3x6" looseleaf pages bound with plastic spiral ring.)



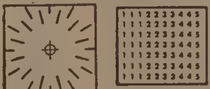
Easy to Apply to Smooth or Many Rough Surfaces

ELECTRONICS WORDS

EM-1. Over 1000 words arranged in alphabetical order. Specify black or white.
47 A 3550 C. Shpg. wt., 4 oz.....Each 4.95

ALPHABET (Specify black or white)

Stock No.	Mfr's Type	Size	EACH
47 A 3551 C	AM-1	⅛"	4.95
47 A 3552 C	AM-2	¼"	4.95
47 A 3553 C	AM-3	⅜"	4.95
47 A 3554 C	AM-4	½"	4.95



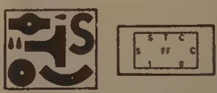
Special Wax-Free Adhesive Assures Permanence

DIAL MARKING KIT

DM-1. 14 pages of black markings, 13 pages of white. Has arcs, dots, lines, etc.
47 A 0243. Shpg. wt., 4 oz......Each 4.95

NUMERALS (Specify black or white)

Stock No.	Mfr's Type	Size	EACH
47 A 3556 C	NM-1	⅛"	4.95
47 A 3557 C	NM-2	¼"	4.95
47 A 3558 C	NM-3	⅜"	4.95
47 A 3559 C	NM-4	½"	4.95



Once Applied, Will Not Peel, Crack or Blister

PC PADS AND LOGIC SYMBOLS

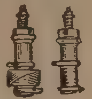
PC-1 Printed Circuit Pads. Black. Thousands of pads: circles with center hole, teardrops, teardrops with vanishing point, double-end teardrops, double-end teardrops with vanishing point, elbows and more.
47 A 3560. Shpg. wt., 4 oz......Each 4.95

LD-1 Logic Diagram Symbols. Black. Contains flip-flops, arrows, arrow heads, time delays, and; hand, or, nor, registers, shift registers, connection dots and more.
47 A 3561. Shpg. wt., 4 oz......Each 4.95

RF Chokes, Adjustable Coils and Coil Winder

J. W. MILLER COILS AND CHOKES

ADJUSTABLE CERAMIC RF COILS



one-impregnated ceramic s. Powdered iron cores. l for transmitters and reers, etc. With mtg. hard. **Standard:** Form size, 3/8" neter and 1 1/16" long; for 1/4" . **Miniature:** 1/4x7/8"; for hole. Av. shpg. wt., 2 oz.

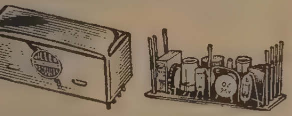
STANDARD

tock No.	Mfr's Type	Min. µH	Max. µH	EACH
A 0982	4400-2	Form only		1.38
A 0983	4403	.99	1.50	1.83
A 0984	4404	1.60	3.10	1.86
A 0985	4405	3.30	6.50	1.89
A 0986	4406	7.30	14.0	1.95
A 0987	4407	16.0	29.0	2.01
A 0988	4408	33.0	66.0	2.10
A 0989	4409	74.0	124	2.16
A 0990	4410	138	238	2.19
A 0991	4411	270	451	2.22
A 0992	4412	495	76.0	2.25
A 0778	4414	1.40	2.00	2.28

MINIATURE

tock No.	Mfr's Type	Min. µH	Max. µH	EACH
A 0870	4500-2	Form only		1.23
A 3930	4501	.44	.76	1.68
A 0871	4502	1.10	1.50	1.68
A 0872	4503	1.70	2.70	1.68
A 0873	4504	3.10	4.80	1.68
A 0874	4505	5.50	8.60	1.74
A 0875	4506	9.90	15.0	1.80
A 0876	4507	17.0	23.0	1.86
A 0877	4508	26.0	33.0	1.89
A 0878	4509	38.0	57.0	1.92
A 0879	4511	66.0	114	1.95
A 0882	4514	350	475	2.04
A 0781	4514-1	528	760	2.10

PRE-PACKAGED AND PRE-TUNED 455-kHZ IF STRIP



nplete 455-kHz IF strip simplifies construc- of many projects. Offers excellent gain dB) and selectivity (6 dB down at 8 kHz). sists of a Miller Type 8901-B Input Match- Transformer and 8902-B IF Strip mounted one board. Total of 21 components on PC rd, including mechanical filter, two transiszed amplifiers and diode detector that can e earphones. No alignment required. Size, 1/2x1 1/2". Shpg. wt., 3 oz.

A 0099 .... 5.75

HIGH "Q" BROADCAST RF COILS

D Unshielded, iron-core coils. Adjustable core. Range indicated obtained using 365 pF variable capacitor. Mount in 1/4" hole. *Padded values for 455 kHz IF. 3/8x2" Av., 4 oz.

Stock No.	Mfr's Type	Use	kHz Range	EACH
54 A 4398	A-5495-A	Antenna	550-1700	1.89
54 A 4399	A-5495-RF	RF	550-1700	1.89
54 A 4400	A-5495-C	Std. Osc.	*400 pF	1.89
54 A 4401	A-5496-C	Tap'd Osc.	*400 pF	1.89

MOISTURE-RESISTANT RF CHOKES

Single layer or 3-pi universal winding insures low distributed capacity. Low-loss molded phenolic or powdered iron core forms. Impregnated with moisture and fungus-resistant varnish. Operate into UHF region. Inductance tolerance ±20%. 1 1/2" leads. Phenolic form, 3/4x3/16" dia. Iron core, 7/8x7/32" dia. Av. wt., 2 oz.

PHENOLIC FORM—SINGLE LAYER

Stock No.	Mfr's Type	µH	Q Min.	Min. Fo(MHz)	EA.
54 A 3828	4602	1.00	60	190	.54
54 A 3829	4604	1.50	58	149	.54
54 A 3830	4606	2.40	56	120	.54
54 A 3831	4608	3.90	60	93	.54
54 A 3833	4609	5.50	57	80	.54
54 A 3834	4610	6.20	57	76	.57
54 A 3835	4611	8.20	57	65	.57
54 A 3836	4612	10.0	36	61	.57

IRON-CORE FORM—SINGLE LAYER

54 A 3838	4624	15.0	62	33	.63
54 A 3840	4628	39.0	70	20	.66
54 A 3841	4629	55.0	72	17	.69
54 A 3844	4632	100.0	107	12	.69

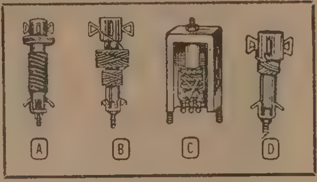
PHENOLIC FORM—3-SECTION

54 A 3845	4642	100	49	11.0	.69
54 A 3846	4644	150	53	8.80	.69
54 A 3850	4646	240	56	7.20	.69
54 A 3856	4652	1000	59	3.70	.75

FERRITE CORE CHOKES

High permeability, small size. For transmitters, receivers, etc. Low DC resistance. 1/4" dia., 7/8" long. 1 1/2" axial leads. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	mH	Ohms	mA	EA.
54 A 1893	6302	2.5	8.3	200	.99
54 A 1894	6304	5	13.5	200	1.14
54 A 1895	6306	10	28	125	1.26
54 A 1896	6308	25	70	75	1.26
54 A 1897	6310	50	110	75	1.50



MINIATURE ADJUSTABLE RF COILS

A Variable-inductance RF coils designed for the most exacting requirements. Use with tuning capacitors of 250 to 450 pF capacity. Type 70-OSC coil has tapped secondary. 70 series installed self-supported. 71-OSC has 2-tap primary. Both track 100 to 550 kHz IF. Maximum size, 1 3/4x3/4" diameter. Av. shpg. wt., 4 oz.

Stock No.	Mfr's Type	Use	kHz Range	EACH
54 A 1972	69-OSC	Osc.	540-1600	1.20
54 A 0866	70-A	Ant.	540-1600	1.35
54 A 0867	70-RF	RF	540-1600	1.35
54 A 0868	70-OSC	Osc.	540-1600	1.20
54 A 0869	71-OSC	Osc.	540-1600	1.74

UNIVERSAL REPLACEMENT COILS

B Compact, variable-inductance iron-core coils for general replacement use in receivers where manufacturers' coils are no longer available. Shielded type. Use with 250-450 pF variable capacitors. Oscillator coil has tapped secondary. 1 3/8x1 3/8x2 1/2". *Tapped sec., primary. 5 oz.

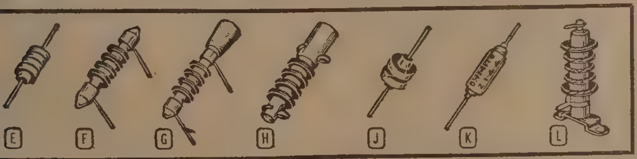
Stock No.	Mfr's Type	Use	kHz Range	EACH
54 A 0748	73-A	Ant.	500-1800	2.49
54 A 0752	73-OSC	Osc.	*100-550	2.49

PRINTED-CIRCUIT RF CHOKES

C Air-core RF chokes specifically designed for printed circuits. Offer wide range of inductances for use in transmitters, receivers, and test equipment. All are varnish-impregnated to resist moisture and corrosion. Have printed-circuit mounting lugs. Forms are 7/8" long. Maximum current rating: Types 970-978, 125 mA; 982, 100 mA; 994, 50 mA. Av. shpg. wt., 1 1/2 oz.

Stock No.	Mfr's Type	mH	Ohms	Dia.	EACH
54 A 1061	970	1	20.6	1 1/16"	.78
54 A 1063	972	1.5	26.4	3/4"	.78
54 A 1067	975	2.7	37.4	1 3/16"	.84
54 A 1070	978	4.7	51.8	7/8"	.87
54 A 1074	982	10.0	81.6	7/8"	.90
54 A 1086	994	100	473	1 1/16"	1.38

IATIONAL AND OHMITE GENERAL-PURPOSE RF CHOKES



75A for transmitters with plate supply up 3000 volts modulated or 4000 volts undulated. For all bands from 80 through 6 ters. R-154U for 20 to 80-meter transmitters. 33 types have 2 sections; R-50 types, 3 or 4 tions. †Vertical mtg. ‡Microhenries. 2 oz.

NATIONAL CHOKES

Stock No.	Mfr's Type	Fig.	mH	mA	Ohms	EA.
A 1115	R-33	J	11‡	350	1.8	.36
A 1116	R-33	J	50‡	225	3.5	.36
A 1117	R-33	J	100‡	200	5.0	.36
A 1118	R-33	J	750‡	125	16	.36
A 1119	R-50	E	0.5	150	15	.42
A 1160	R-50	E	1.0	135	23	.42
A 1161	R-50	E	2.5	125	38	.42
A 1162	R-50	E	10.0	115	36	.72
A 1169	R-60	E	4‡	700	.15	.29
A 1301	R-100	F	2.5	115	44	.57
A 1368	†R-100U	G	2.5	115	44	.74
A 1495	†R-100S	H	2.5	115	44	.99

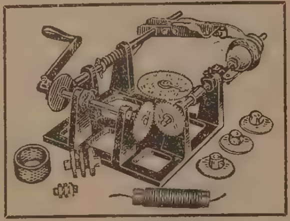
NATIONAL CHOKES (Cont'd)

Stock No.	Mfr's Type	Fig.	mH	mA	Ohms	EACH
54 A 1503	R-154U	L	1.0	600	6.0	2.01
54 A 1505	R-300	F	0.5	400	7.0	.57
54 A 1506	R-300	F	1.0	400	11	.57
54 A 1507	R-300	F	2.5	375	17	.74
54 A 1508	R-300	F	5.0	325	24	.90
54 A 1511	†R-300U	G	2.5	375	17	.92

OHMITE CHOKES

Stock No.	Mfr's Type	Fig.	µH	mA	MHz	EACH
54 A 1548	Z-460	K	0.2	1000	320-520	.45
54 A 1549	Z-235	K	0.84	1000	160-350	.45
54 A 1550	Z-144	K	1.8	1000	80-200	.45
54 A 1551	Z-50	K	7.0	1000	35-110	.48
54 A 1552	Z-28	K	21	600	20-60	.60
54 A 1553	Z-14	K	44	600	7-35	.71

MORRIS "COILMASTER" COIL WINDER



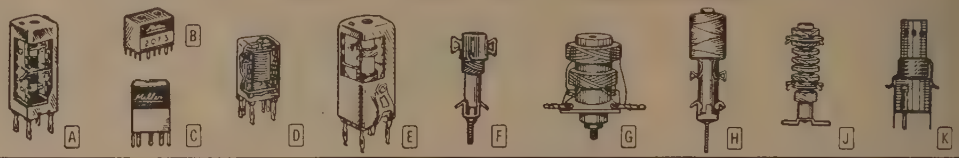
- Produces Self-Supporting, Universal and Honeycomb Coils
- Can be Used With #22 to #40 Wire

Accurate, easy-to-use hand-operated coil winder produces self-supporting, universal and honeycomb coils, plus solenoids, single-layer coils, etc. It's a big time-saver and gives your work a professional appearance. Indicator counts number of coil turns. Easily adjustable for pi-spacing and various diameter coil forms. Extremely versatile, it accepts No. 22 through No. 40 wire. 3 cams and 4 gears permit winding virtually all types of coils. Wire and coil forms not included. With instructions. Base size 5x5". Shpg. wt., 4 lbs.

54 A 1053 .... 8.50

J. W. Miller and Nytronics Components

J. W. MILLER RF COILS AND IF TRANSFORMERS



MINIATURE IF TRANSFORMERS

A Shell-core, permeability-tuned IF transformers. Tunable powdered-iron cores. *Built-in diode filter capacitor. Size: ¾″ square x 2″. With all necessary mounting hardware. Av. shpg. wt., 4 oz.

Stock No.	Type	Freq.	Use	EACH
54 A 0727	12-C1	455 kHz	IF Input	1.74
54 A 0728	12-C2	455 kHz	IF Output	1.74
54 A 0787	12-C6	455 kHz	IF Output*	1.80
54 A 0718	12-C9	455 kHz	Input (AC-DC)	1.74
54 A 0719	12-C10	455 kHz	Output (AC-DC)	1.74
54 A 1317	12-C12	455 kHz	Tapped Pri.	2.04
54 A 1320	12-C45	455 kHz	Discriminator	2.85
54 A 0729	12-H1	262 kHz	IF Input	1.83
54 A 0731	12-H2	262 kHz	IF Output	1.83
54 A 0788	12-H6	262 kHz	IF Output*	1.89
54 A 1321	13-W1	1500 kHz	Input or Inter.	1.74
54 A 1322	13-W2	1500 kHz	IF Output	1.74
54 A 0732	1463	10.7 mHz	Input or Inter.	2.04
54 A 0733	1464	10.7 mHz	Discriminator	2.37
54 A 1323	1464-WB	10.7 mHz	Discriminator	2.52
54 A 0734	1465	10.7 mHz	Ratio Detect.	2.46
54 A 1324	1465-WB	10.7 mHz	Ratio Detect.	2.46
54 A 0789	6203	4.5 mHz	Input or Inter.	2.07
54 A 0790	6204	4.5 mHz	Discriminator	2.37
54 A 0791	6205	4.5 mHz	Ratio Detect.	2.37

MINIATURE IF PRINTED-CIRCUIT TRANSFORMERS

A For replacement and experimental use in receivers. Shell-core, permeability tuned. Tune from top and bottom of shield. ¾″ sq. x 2″. Supplied complete with mounting hardware. Av. shpg. wt., 4 oz.

Stock No.	Mfr's Type	Freq.	Use	EA.
54 A 1359	13-PC1	455 kHz	IF Input	1.74
54 A 1360	13-PC2	455 kHz	IF Output	1.74
54 A 1364	13-PC9	455 kHz	Input (AC-DC)	1.74
54 A 1365	13-PC10	455 kHz	Outpt. (AC-DC)	1.74
54 A 1712	1463-PC	10.7 mHz	Input or Inter.	2.04

10.7-MHz TRANSFORMERS FOR TRANSISTOR CIRCUITS

B **Subminiature Style.** IF and ratio detector transformers. IF transformers are ½″ high x 1¹³⁄₃₂″ square; ratio detector, ½x1³⁄₃₂x¾″. Supplied with mounting hardware. Av. shpg. wt., 2 oz.

Stock No.	Type	Use	EA.
54 A 0025	2070	1st IF Input	2.37
54 A 0028	2071	2nd IF Interstage	2.37
54 A 0029	2072	3rd IF Output	2.37
54 A 0038	2073	Ratio Detector	2.82

HORIZONTAL OSCILLATOR AND SYNC-STABILIZER COIL

Type 6183. (Not Illus.) Permeability tuned coil features dual windings for sync frequency and phase circuit. Has aluminum shield with 6-32 spade bolt mounting. Coil may be reversed in shield for top or bottom mounting. 1¹⁄₁₆″ square by 2½″. Shpg. wt., 5 oz.
54 A 1089............................2.37

"MINI MINIATURE" TRANSISTOR IF TRANSFORMERS (455 kHz)

C Only ½″ high by ¹³⁄₃₂″ sq. Same type of threaded tuning as microminiatures, above. For use with RCA 2N218 and 2N219 or 2N139 and 2N140; transistors. *Type 2065 is matching oscillator requiring tuning capacitor from 78 to 110 µF maximum tolerance. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	Impedance	Use	EA.
54 A 2484	2066	50K-800 ohms	Input	2.22
54 A 2485	2067	30K-500 ohms	Instage	2.22
54 A 2486	2068	20K-5K ohms	Output	2.22
54 A 2488	2065	Matching Oscillator*		2.22

455-kHz IF TRANSFORMERS FOR TRANSISTOR CIRCUITS

D **Miniature Style.** Hi-Z tapped primary winding coupled to low-Z secondary. ¾″ high by ½″ square. *Primary-secondary. Av. shpg. wt., 3 oz.

Stock No.	Type	*Ohms	Use	EACH
54 A 0002	2031	10K-600	Input	2.64
54 A 0003	2032	10K-1000	Output	2.64
54 A 0896	2041	25K-600	Input	2.64
54 A 0973	2042	25K-1000	Output	2.64

MINIATURE "J-TRAN" TOP-TUNED IF TRANSFORMERS

E Units have hollow hexagonal-hole cores for either double or single-ended tuning. Mount by snap fastener. ¾″ square by 2″. Av. shpg. wt., 4 oz.

Stock No.	Mfr's Type	Freq.	Use	EA.
54 A 1954	14-C1	455 kHz	IF Input	1.74
54 A 1955	14-C2	455 kHz	IF Output	1.74
54 A 2467	14-C9	455 kHz	Input (AC-DC)	1.74
54 A 2468	14-C10	455 kHz	Outpt. (AC-DC)	1.74
54 A 2469	6270	4.5 mHz	Input or Inter.	1.89

TRANSISTOR OSCILLATOR COILS

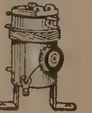
F **Type 2020.** Use in one-transistor osc. circuit. For 365 pF capacitor, 455 kHz IF, ⅝x1⅛″. Shpg. wt., 3 oz.
54 A 0895............................1.74

Type 2022. Similar to above, except for use with variable capacitor 78-100 pF, maximum. Shpg. wt., 3 oz.
54 A 0974............................1.74

MIDGET OSCILLATOR COIL FOR PENTAGRID CONVERTERS

G **Type 5480C.** For pentagrid converter tubes; general replacement. When used with 365-pF variable capacitor, covers 540-1600 kHz. IF frequency, 455 kHz. For use in unshielded applications. Series pad capacity,.0004 µF. Size, 1x1″. Shpg. wt., 4 oz.
54 A 0743............................1.35

CAPACITY-OPERATED RELAY COIL



Type 695. For alarm systems, window displays and other capacity-operated devices. Consists of center-tapped oscillator winding; adjustable grid coupling capacitor; RF choke on bakelite form. ⅞x2¼″ high. Supplied with wiring diagram. Shpg. wt., 4 oz.
54 A 1057 ....2.49

TV OSCILLATOR SYNC STABILIZER (RINGING) COIL

H **Type 6210.** Has bakelite form with 7⁄16″ mounting clip. 16-42 mH range. Size, ¾x 2½″. Shpg. wt., 2 oz.
54 A 1092..............................1.74

HORIZONTAL LINEARITY AND WIDTH CONTROLS

H Iron-core variable inductance coils for horizontal sweep circuits. Permit adjustments over a wide inductance range to obtain the proper match for best operating characteristics. Mounting clip fits 5⁄16″ hole; clip for 7⁄16″ hole with adapter also supplied. Size, ¾x2½″ long (maximum) on phenolic coil forms. Av. shpg. wt., 4 oz.

Stock No.	Mfr's Type	Millihenries Range	EA.
54 A 1093	6313	.5-5	1.38
54 A 1094	6314	2.0-18	1.38
54 A 1095	6315	4.0-30	1.38
54 A 1098	6319	8.0-60	1.74
54 A 0049	6330	45-215	1.89
54 A 0051	6195	.185-1	1.14
54 A 0052	6196	.054-.245	1.02

HIGH-VOLTAGE RF POWER SUPPLY TRANSFORMER

J **Type 4526.** Provides voltage up to 10,000 V DC (30,000 when used in a voltage rectifier-tripler circuit). 2¼″ dia. x 6″ high.
54 A 1102. Shpg. wt., 4 oz..............9.45

VERTICAL-MOUNTING PRINTED CIRCUIT COILS

K "Velvetork" adjustable RF coils. Can be adjusted from either end of coil form. *RPC suffix omitted from Type No. †Maximum inductance at minimum core position. Coil forms are ⅜-inch diameter and ¾-inch long. Av. shpg. wt., 3 oz.

Stock No.	Type 23A-*	µH†	Q Min.	Test Freq.	EACH
54 A 0755	107	.095	77	25.0 MHz	1.05
54 A 0758	827	.640	101	25.0 MHz	1.05
54 A 0759	106	.760	98	25.0 MHz	1.05
54 A 0760	156	1.20	65	7.9 MHz	1.05
54 A 0761	336	2.40	64	7.9 MHz	1.14
54 A 0765	475	31.0	58	2.5 MHz	1.23
54 A 0766	685	43.5	56	2.5 MHz	1.23
54 A 0767	825	61.0	48	2.5 MHz	1.23
54 A 0768	224	160.0	63	790.0 kHz	1.23
54 A 0773	823	7.40	42	250.0 kHz	1.32

NYTRONICS "SUPER WEE-DUCTORS" SUBMINIATURE RF INDUCTORS

Only 0.410″ by 0.157″

Standard subminiature RF inductors offering the design engineer or serviceman a quality component suitable for a wide variety of electronic applications. Combine best features of epoxy molding and shielding techniques for reliability, top performance, and minimum coupling in high density packaging. High altitude operation: up to 70,000 feet. Inductive Tolerance: ±10%. Less than 3% coupling. Operating Temperature Range: −55°C to +125°C. Dielectric Strength: withstands an applied voltage of 1400 volts rms. Marking: standard color-code per governing specifications. Length: 0.140″. Diameter: 0.157″. AWG #22 leads, T termination. Av. shpg. wt., 1 oz.

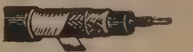
Stock No.	Type SWD-	Ind. µH	Q	@ MHz	EACH
54 A 0100	100,000	100,000	18	.079	1.50
54 A 0101	68,000	68,000	23	.079	1.50
54 A 0102	47,000	47,000	23	.079	1.50
54 A 0103	33,000	33 000	27	.079	1.50
54 A 0104	22,000	22,000	27	.079	1.50
54 A 0105	15,000	15,000	31	.079	1.50
54 A 0106	10,000	10,000	39	.25	1.50
54 A 0107	6800	6800	43	.25	1.40
54 A 0108	4700	4700	44	.25	1.40
54 A 0109	3300	3300	43	.25	1.40
54 A 0110	2200	2200	50	.25	1.40
54 A 0111	1500	1500	49	.25	1.40
54 A 0112	1000	1000	65	.79	1.40
54 A 0113	680	680	60	.79	1.40
54 A 0114	470	470	60	.79	1.40
54 A 0115	330	330	54	.79	1.40
54 A 0116	220	220	58	.79	1.40
54 A 0117	150	150	56	.79	1.40

Stock No.	Type SWD-	Ind. µH	Q	@ MHz	EACH
54 A 0118	100	100	52	2.5	1.40
54 A 0119	68	68	51	2.5	1.40
54 A 0120	47	47	52	2.5	1.40
54 A 0121	33	33	45	2.5	1.40
54 A 0122	22	22	46	2.5	1.40
54 A 0123	15	15	44	2.5	1.20
54 A 0124	10	10	49	7.9	1.20
54 A 0125	6.8	6.8	50	7.9	1.20
54 A 0126	4.7	4.7	44	7.9	1.20
54 A 0127	3.3	3.3	44	7.9	1.20
54 A 0128	2.2	2.2	45	7.9	1.20
54 A 0129	1.5	1.5	45	7.9	1.20
54 A 0130	1.0	1.0	47	25	1.20
54 A 0131	.68	.68	42	25	1.20
54 A 0132	.47	.47	44	25	1.20
54·A 0133	.33	.33	46	25	1.20
54 A 0135	.15	.15	51	25	1.20
54 A 0136	.10	.10	50	25	1.20

Belden Microphone and Special-Purpose Cable

RUBBER-COVERED MICROPHONE AND SHIELDED POWER-SUPPLY CABLE

commended for greater abrasion resistance and extra flexibility. Especially ted for installations where cable must make tight bends around corners or perfectly flat. Available in single or multiple (up to 8) conductors. Type 8428 s heavy-duty neoprene jacket; Type 8413 is miniature-sized cable. Av. shpg. ., per 100 ft., 6 lbs.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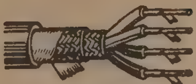
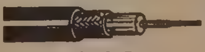

MULTIPLE

Ifr's Type	No. Cond.	AWG Stranding	Cap. pF	O.D.	Working Volts	60-FT. SPOOL		100-FT. SPOOL		250-FT. SPOOL	
						Stock No.	EACH	Stock No.	EACH	Stock No.	EACH
410	1	25(7x33)	33	.245"	3000	55 A 7798	5.25	55 A 7799	9.75	55 A 7814	22.65
412	2	20(26x34)	42	.268"	600	55 A 7827	5.80	55 A 7828	10.75	55 A 7829	24.70
426	6	20(26x34)	40	.349"	600	....	....	55 A 7843	20.65	55 A 7844 U	51.00
427	7	20(26x34)	40	.360"	600	....	....	55 A 7845	22.20	....	....
418	8	20(26x34)	42	.386"	600	....	....	55 A 7846	25.50	55 A 7847 K	61.80
428	2	18(41x34)	47	.295"	600	....	....	55 A 7848	14.65	....	....
413	2	24(45x40)	38	.185"	300	55 A 7853	5.50	55 A 7855	10.15	....	....

VINYL PLASTIC-COVERED MICROPHONE AND SHIELDED POWER-SUPPLY CABLE

wer capacitance and loss figures than standard rubber-covered cables. sist ozone deterioration; have high resistance to oil, gasoline, and other emicals. All are relatively light weight with small diameters. 8411 is ted for lapel or lavalier microphones. 8420 is a miniature type cable. . shpg. wt., per 100 ft., 3½ lbs.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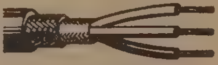
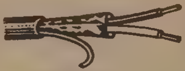
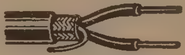

MULTIPLE

Ifr's Type	No. Cond.	AWG Stranding	Cap. pF	O.D.	Working Volts	60-FT. SPOOL		100-FT. SPOOL		250-FT. SPOOL	
						Stock No.	EACH	Stock No.	EACH	Stock No.	EACH
401	1	25(7x33)	25	.200"	5000	55 A 7863	2.91	55 A 7864	5.35	55 A 7865	11.35
411	1	25(7x33)	34	.144"	3500	55 A 7868	2.25	55 A 7869	4.20	55 A 7870	8.95
422	2	22(16x34)	18	.231"	1000	55 A 7874	4.50	55 A 7875	7.85	55 A 7876	17.40
403	3	20(26x34)	25	.245"	600	55 A 7878	5.60	55 A 7879	10.35	55 A 7880	23.25
404	4	20(26x34)	25	.255"	600	....	....	55 A 7882	11.40	55 A 7883	26.25
405	5	20(26x34)	25	.275"	600	....	....	....	....	55 A 7884	31.00
420	2	24(45x40)	20	.185"	500	55 A 7888	4.00	55 A 7889	7.45	55 A 7890	17.50

STANDARD AND MINIATURE BROADCAST AUDIO CABLES

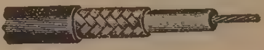
vo-conductor, color-coded cables. High insulation resistance and effective shield- eliminate noise and cross-talk. Have free stripping jackets, fast shield termina-n and small diameters. Tinned drain-wire prevents current loops. §Spiral-apped. †Braided. **Specify both Stock No. and Mfr's Type when ordering.**


MINIATURE CABLE


STANDARD CABLE

r's pe	Type	AWG Stranding	O.D. Inches	Wkg. Volts	Shields	Jacket	Lbs., 100 ft.	100-FT. SPOOL		500-FT. SPOOL	
								Stock No.	EACH	Stock No.	EACH
37	CBS	22(solid)	.200	200	Copper†	Black Vinyl	3½	....	....	55 A 7451	22.65
41	CBS	22(16x34)	.210	200	Copper†	Black Vinyl	3	55 A 7893	5.85	55 A 7474	25.90
50	Miniature	22(solid)	.118	200	Alum.-"Mylar"§	Black Vinyl	1½	55 A 7894	3.85	55 A 7895	14.20
51	Miniature	22(7x30)	.135	200	Alum.-"Mylar"§	Black Vinyl	1¾	55 A 8562	4.38	55 A 7898	17.85

RG HIGH-FREQUENCY COAXIAL CABLE



w-loss, flexible polyethylene inner jacket, copper-braid shield, ck vinyl jacket. Constant electrical characteristics regardless changes in freq. or temp. Type 8214 is excellent for use in CB d amateur Radio as 50-ohm antenna cable. *Indicates cable has cellular polyethylene foam core for very low losses even at ultra-high frequency. Black outer covering. 100-ft. spool only. **Specify Stock Number and Manufacturer's Type when ordering.**

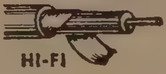
Stock No.	Mfr's Type	RG No.	AWG (Stranding)	O.D. (In.)	Imp. Ohms	Cap. pF/Ft.	Conductor	Lbs.	100-FT. SPOOL
55 A 7923	8237	8/U	13(7x21)	.405	52	29.5	Bare Copper	11¼	13.75
55 A 7387	8214*	8/U	11(7x19)	.403	50	26	Bare Copper	12	15.30
55 A 7927	8240	58/U	20(Solid)	.195	53.5	28.5	Bare Copper	3¼	4.95
55 A 7931	8216	174/U	26(7x34)	.100	50	30.4	Bare Copper	1	3.75

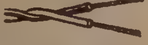
75-OHM AND 73-OHM RG COAXIAL CABLE FOR COLOR-TV LEAD-IN

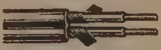
55 A 7264	8238	11/U	18(7x26)	.405	75	20.5	Tinned Copper	10¼	11.85
55 A 7928	8241	59/U	22(Solid)	.242	73	21	Bare Copper	4	5.75

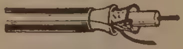
HI-FI, STEREO AND PHONO CABLES

Make Allied Radio headquarters for all your electronic needs. You can depend on Allied for prompt service.


HI-FI


PHONO CABLE


DUAL CHANNEL

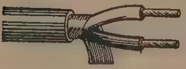

SINGLE

ave stranded conductors of tinned copper with vinyl or rubber in-lation. Type 8421: Hi-fi cable, spiral wrap. Types 8430 and 8431: r mono phono pickup applications. 8419 and 8429: dual channel, for stereo phono pickups. 8416: for stereo and language labs. 8417: single, miniature mono phono connecting cable. *Use two cables for maximum channel separation. †.106x.213.

Ifr's Type	Outer Jacket	No. Cond. & AWG	O.D.	Lbs., 100 ft.	25-FT. SPOOL		50-FT. SPOOL		100-FT. SPOOL		250-FT. SPOOL	
					Stock No.	EACH	Stock No.	EACH	Stock No.	EACH	Stock No.	EACH
8421	Chrome Vinyl	1-25(7x33)	.180	2¼	55 A 8781	1.71	55 A 8782	3.10	55 A 8783	5.05	55 A 8784	11.20
8431	Rubber	1-24(16x36)	.095	¼	55 A 9930	1.38	....	....	55 A 9931	4.38	....	....
8430	Vinyl	2-32(7x40)	.050	1¼	55 A 9927	.87	....	....	....	....	55 A 9928	4.80
8416	Chrome Vinyl	2-25(7x33)	†	2½	55 A 9382	1.86	55 A 9390	3.40	55 A 9391	5.95	55 A 9412	13.65
8429	Vinyl	2-32(7x40)	.057	1¼	55 A 9933	1.47	....	....	....	....	55 A 9934	10.05
8419	Vinyl	3-32(7x40)	.067	1½	55 A 8330	1.71	....	....	....	....	55 A 8333	12.25
8417	Chrome Vinyl	1-25(7x33)	.140	1⅓	55 A 7671	1.41	55 A 7672	2.27	55 A 7673	4.30	55 A 7674	9.30

Belden Sound-System and Intercom Cable

TWO AND THREE-CONDUCTOR SHIELDED CABLE



Variety of gauges, insulations, shieldings and jackets for PA and intercom use. All types listed in table below have tinned copper conductors. *Polyethylene insulated conductors, aluminum "Mylar" wrapped shield, stranded tinned copper ground wire. #Chrome vinyl jacket. §Spiral-wrapped tinned shield. ‡Braided tinned shield as jacket. †Vinyl insulated conductors. Type 8641, No. 24 stranded conductors (7x32). No. 22 stranded: 8735, 8761, 8771 (7x30). No. 20 stranded: 8762, 8772 (7x28). No. 18 stranded: 8760, 8770 (16x30). No. 22 solid: 8731. No. 16 stranded: 8780, (19x29). **Specify Stock No. and Mfr's Type.** Av. shpg. wt., 100 ft., 3½ lbs.

Mfr's Type	Cond.	O. D.	100-FT. SPOOL		500-FT. SPOOL	
			Stock No.	EACH	Stock No.	EACH
8208#	2	.255″	55 A 7555	7.90	55 A 7315 X	34.80
8641	2	.160″	55 A 7676	3.75	55 A 7677	15.00
8731*#§	3	.178″			55 A 7559	18.70
8735†‡	3	.199″	55 A 7563	5.70	55 A 7565	24.30
8760*#	2	.222″			55 A 7398	24.00
8761*#	2	.167″			55 A 7568	15.60
8762*#	2	.196″	55 A 7575	4.80	55 A 7577	19.90
8770*#	3	.236″			55 A 7401 U	30.40
8771*#	3	.175″			55 A 7442	19.65
8772*#	3	.200″			55 A 7489	24.75
8780†§‡	2	.266″			55 A 7430 X	34.45
8790†#§	2	.231″	55 A 7572	6.25	55 A 7573 U	26.70

TWO AND THREE-CONDUCTOR UNSHIELDED CABLE

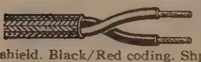
High-quality cable for PA and intercom installations, speaker extensions, alarm systems, etc. High insulation resistance. Have vinyl insulated, untinned conductors, except † which are tinned, and § stranded (19x29). Jackets of chrome vinyl, except 8794 which has rose-gray vinyl jacket and 8481, 8482, 8460, and 8470 which are twisted pair types without jacket. 8483 is cabled and without jacket. *Solid copper conductors. ‡Stranded (10x30). **Be certain to specify both Stock No. and Mfr's Type when ordering.**

Mfr's Type	Cond. & AWG	O. D.	Lbs., 100 ft.	Mfr's Type	Cond. & AWG	O. D.	Lbs., 100 ft.
8481*	2-22	.112″	1	8487*	3-19	.180″	2½
8794*	3-22	.168″	1½	8460†	2-18	.175″	1
8205‡	2-20	.190″	1½	8461†	2-18	.226″	3
8482*	2-19	.130″	1½	8470§	2-16	.195″	2¾
8483*	3-19	.132″	1¼	8471§	2-16	.256″	4
8486*	2-19	.162″	2	8473§	2-14	.332″	6

COST PER SPOOL

Mfr's Type	100-FT. SPOOL		500-FT. SPOOL	
	Stock No.	EACH	Stock No.	EACH
8481	55 A 7612	1.95	55 A 7614	6.25
8794			55 A 7642	12.15
8205	55 A 7597	3.10	55 A 7600	11.40
8482	55 A 7616	2.45	55 A 7631	8.80
8483	55 A 7633	3.15	55 A 8563	12.45
8486			55 A 7636	11.35
8487			55 A 7638	15.40
8460	55 A 7602	3.45	55 A 7603	13.35
8461	55 A 7610	4.40	55 A 7434	17.85
8470			55 A 7436	17.85
8471			55 A 7611	22.30
8473			55 A 7327 U	36.75

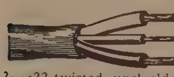
TWO-CONDUCTOR SHIELDED CABLE



For speaker systems, intercoms. All have vinyl plastic insulation and jackets except 8758 which has copper braid jacket. Tinned conductors *Tinned copper, spiral-wrapped shield. Black/Red coding. Shpg. wt., per 100 ft. of cable, 2½ lbs.

Mfr's Type	AWG Stranding	O. D.	100-FT. SPOOL		500-FT. SPOOL	
			Stock No.	EACH	Stock No.	EACH
8737*	22 (7x30)	.170″	55 A 7644	4.05	55 A 7447	17.85
8758	20 (7x28)	.165″	55 A 7647	4.70	55 A 7648	19.05
8759*	20 (7x28)	.195″	55 A 7649	5.05	55 A 7666	21.00
8739*	22 (Solid)	.160″	55 A 7645	3.85	55 A 7449	16.20

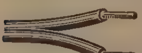
VINYL "JUKE BOX" CABLE



Stranded, color coded, tinned copper conductors. Type 8783: 1—#20, 2—#16. Type 8786 (oval): 4—#24 twisted under shield, 2—#22 twisted, unshielded. (All shields tinned copper braid). Av. shpg. wt. per 100-foot spool, 5 lbs.

Mfr's Type	Cond.	O. D.	100-FT. SPOOL		500-FT. SPOOL	
			Stock No.	EACH	Stock No.	EACH
8783	3	.250″	55 A 7775	6.45	55 A 7776 U	28.90
8786	6	.256″	55 A 7777	7.65	55 A 7778	34.50

VINYL "JUKE BOX" SPEAKER CABLE



Type 8782. Two parallel conductors, 1 tinned, 1 bare; #24, 7x32 stranding. Vinyl insulation. Vinyl jacket. **In chrome, clear or white color, specify choice.** O.D., .058x115″. Wt., 100 ft., 10 oz.

55 A 8828 C 50-ft. Spool......................................1.11

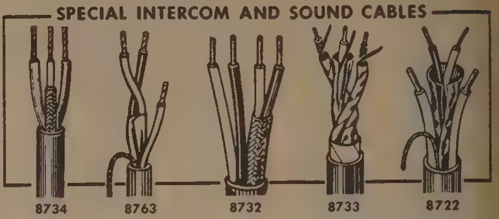
55 A 8829 C. 100-ft. Spool .1.65 **55 A 7051 C. 500-ft. Spool**.5.50

55 A 7052 C. 1000-ft. Spool......................................10.95

Type 8649 Two-Conductor "Juke-Box" Cable. Same as above but #20, 7x38 stranding. **In chrome or clear Specify color choice when ordering.** 100-ft. spools only. Wt., 10 oz.

55 A 7678 C. 100-ft. Spool......................................2.43

SPECIAL INTERCOM AND SOUND CABLES



Type 8734. 3 cond. (vinyl-ins.). Tinned copper shield on one; 2 unshielded. AWG: 22(7x30). Chrome vinyl jacket. Wt., 100 ft., 2¾ lbs.

Type 8763. 3 cond. (polyethylene-ins.). Aluminum-Mylar shield on 2, 1 unshielded. #20 stranded grd. wire. Chrome vinyl jacket overall. AWG: 20 (7x28). Shpg. wt. per 100 ft., 3¼ lbs.

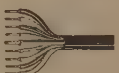
Type 8732. 4 cond. (polyethylene-ins.). 1 pr. tinned copper, shielded; 1 pr. unshielded. 22 (7x30). Chrome vinyl plastic jacket. Shpg. wt., per 100 ft., 3 lbs.

Type 8733. 3 cond., separately aluminum-Mylar shielded. Ground wire tinned cadmium-bronze. "Beldfoil Z" foil. AWG: 22 (7x30). Shpg. wt., per 100 ft., 3 lbs.

Type 8722. 4 cond. (vinyl-ins.): 2 alum.-Mylar shield on 2; unshielded. Tinned grd. 20 (7x28). Chrome vin. jacket 100 ft., 4½ lbs.

Mfr's Type	Cond.	O. D.	100-FT. SPOOL		600-FT. SPOOL	
			Stock No.	EACH	Stock No.	EACH
8734	3	.194″	55 A 7685	5.05	55 A 7445	21.00
8763	2	.210″			55 A 7471	24.30
8732	4	.188x.296″	55 A 7684	6.55	55 A 7465	27.60
8733	3	.205″	55 A 7687	6.55	55 A 7329	27.60
8722	4	.260″			55 A 7675	30.75

MULTIPLE-CONDUCTOR CABLE (NOT PAIRED)



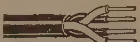
Top-quality multiple-conductor cable for permanent installations of intercoms, speakers and control circuits—as well as other applications requiring a highly durable, flexible and lightweight cable. Conductors are non-paired, plastic-insulated, flexible tinned, stranded copper wire, with color-coded plastic insulation—all cabled together and enclosed in an overall chrome vinyl jacket. All types are fully waterproof—oil, weather and tear-resistant—for long life under difficult environmental conditions. Cables are flexible and easily stripped. *Have 2 conductors of No. 18 stranded wire (16x30); other conductors are No. 22 stranded. **Specify both Stock No. and Mfr's Type when ordering.**

Mfr's Type	Cond.	AWG Stranding	O. D.	Mfr's Type	Cond.	AWG Stranding	O. D.
8443	3	22 (7x30)	.150″	*8446	6	18 (16x30)	.222″
8444	4	22 (7x30)	.168″	*8448	8	18 (16x30)	.250″
8445	5	22 (7x30)	.180″	*8449	9	18 (16x30)	.261″

COST PER SPOOL

Mfr's Type	Weight Per 100-Ft.	100-FT. SPOOL	
		Stock No.	EACH
8443	2 lbs.	55 A 7498	3.10
8444	2¼ lbs.	55 A 7504	4.15
8445	2½ lbs.	55 A 7510	4.80
8446	4 lbs.	55 A 7524	7.15
8448	4¾ lbs.	55 A 7536	8.55
8449	5 lbs.	55 A 7539	9.25

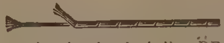
PAIRED VINYL UNSHIELDED CABLE



For intercom and telephone wiring. No. 22 solid tinned copper except *No. 22 stranded (7x30). Color-coded vinyl plastic insulation. Conductors cabled in twisted pairs; chrome vinyl plastic overall. Provide a quiet circuit, free from crosstalk. Vinyl plastic insulation for high dielectric strength. **Be certain to specify both the Mfr's Type and the spool size desired when ordering.**

Mfr's Type	Cond.	O. D.	Lbs., 100 ft.	100-FT. SPOOL		500-FT. SPOOL	
				Stock No.	EACH	Stock No.	EACH
8442*	2	.165″	1½			55 A 7690	10.05
8740	2	.150″	1¾	55 A 7691	2.40	55 A 7692	8.55
8741	4	.201″	2½	55 A 7693	4.05	55 A 7455	16.20
8742	6	.240″	3½	55 A 8565	5.35	55 A 7458	22.75
8757	8	.225″	4			55 A 7407 X	28.90
8743	12	.305″	4¾	55 A 8572	8.40	55 A 7460 K	38.85
8747*	12	.340″	5½	55 A 7697	10.45	55 A 7698 X	48.00
8744	18	.354″	6½	55 A 8552	12.00	55 A 8553 U	56.25
8748*	18	.389″	8	55 A 7699	14.70	55 A 7002 U	70.50
8753	22	.384″	8	55 A 7700	14.85	55 A 7467 U	71.25
8754	26	.409″	11	55 A 8555	16.80	55 A 7476 Z	81.00
8745	30	.420″	10	55 A 7696	20.65	55 A 7462 Z	95.25
8755	38	.480″	15			55 A 7478 Z	123.75
8756	46	.510″	17¼			55 A 7480 Z	145.50

BELDEN LITZ WIRE



Type 8817. 5x44 stranded copper Cel-enamel insulated with one nylon wrap. Specifically made for rewinding antenna primaries, hand-winding RF coils, IF coils and similar radio frequency applications. Outside diameter, .008″. Shpg. wt., 2 oz.

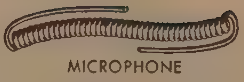
55 A 8981. 100-Ft. Spool......................................71

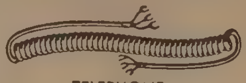
Belden Wire and Cable

RETRACTILE (COILED) MICROPHONE AND TELEPHONE CABLE

ng. coiled cables extend up to six times their
ıal length. Conveniently retract out-of-way when
n use. Have tinned cadmium-bronze conductors.

Mike cables have braided shield, except *unshielded. Types 8494 and 8495 are unshielded telephone cords with spade terminals and strain relief. Wt., ¼ lb.





's ·e	No. Cond.	Description	Jacket	AWG Stranding	O. D. Inches	Extends		Stock No.	EACH
						From	To		
7	3	Microphone Cable	Neoprene	23(21x36)	.250	11½″	6′	55 A 7279	1.56
9	1	Microphone Cable	Neoprene	24(45x40)	.160	7½″	4′	55 A 7286	1.05
0	5	Microphone Cable	Neoprene	23(21x36)	.265	11½″	6′	55 A 7613	1.62
4	4	Telephone Cord	Vinyl	23(21x36)	.245	10″	4½′	55 A 7276	1.80
.5	3	Telephone Cord	Vinyl	23(21x36)	.220	10″	4½′	55 A 7277	1.41

#18 RUBBER-COVERED FLEXIBLE TEST-PROD WIRE

6 stranded, tinned copper, cotton wrap.
: .230-inch O.D.; .088-inch insulation;
)0 WV; 29,000 puncture volts. 8899:
-inch O.D.; .045-inch insulation; 5000
20,000 puncture volts; available in green and yellow for patch cord
Shpg. wt., per 25′ spool, 8 oz.; 100′ spool, 2 lbs.; 500′ spool, 9 lbs.

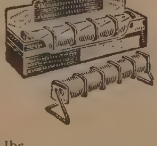
Type 8898—Red			Type 8898—Black		
ock No.	Spool	EACH	Stock No.	Spool	EACH
A 7737	25′	2.10	55 A 7744	25′	2.10
A 7738	100′	5.40	55 A 7750	100′	5.40
A 7739	500′	22.65	55 A 7751	500′	22.65
Type 8899—Red			**Type 8899—Black**		
A 7759	25′	1.23	55 A 7763	25′	1.23
A 7760	100′	3.90	55 A 7764	100′	3.90
A 7761	500′	14.05	55 A 7765	500′	14.05
Type 8899—Yellow			**Type 8899—Green**		
ock No.	Spool	EACH	Stock No.	Spool	EACH
A 7659	25′	1.23	55 A 7660	25′	1.23
A 7623	100′	3.90	55 A 7624	100′	3.90
A 7625	500′	14.05	55 A 7626	500′	14.05

RIR THERMOPLASTIC HOOKUP WIRE

y-duty thermoplastic insulated hookup wire.
ufactured to rigid industrial specifications. Rated
000 volts, rms. Has tinned copper conductors
.017″-thick insulation. Wire is available in black,
n, red, orange, yellow, green, blue, and white.
ify **your choice when ordering.** Av. shpg. wt.
100-ft. spool, 1 lb.

fr's ype	Size	Strands	Outside Diameter	100-Ft. Spool	
				Stock No.	EACH
525	24	7x32	.058″	55 A 7244 C	1.34
530	22	Solid	.059″	55 A 7218 C	1.23
524	22	7x30	.064″	55 A 7219 C	1.47
529	20	Solid	.066″	55 A 7220 C	1.47
523	20	10x30	.070″	55 A 7221 C	1.67
522	18	16x30	.080″	55 A 7110 C	2.10
528	18	Solid	.074″	55 A 7112 C	1.86
531	16	Solid	.085″	55 A 7246 C	2.33
521	16	26x30	.098″	55 A 7114 C	2.81
520	14	41x30	.111″	55 A 7116 C	4.00
527	12	65x30	.130″	55 A 7118 C	5.70

ASSORTED WIRE KITS



e 8822. Handy kit contains ten 25-ft. spools
ype 8529 hookup wire (described in table,
e) set in a convenient dispenser rack. Wire
pplied in the following colors: black, blue,
n, red, white, yellow, orange, brown, gray,
violet. Shpg. wt., 2½ lbs.
A 7226 .... 6.60

e 8824. Eight 25-ft. spools of Type 8523
up wire (see table above) and a dispenser
. Colors supplied; black, blue, green, red,
e, yellow, orange, and brown. Shpg. wt., 2¼ lbs.
A 7227 .... 5.76

SHIELDED HOOKUP AND GRID WIRE

e 8885. Single conductor #20
nded (10x30) tinned copper con-
or; .015″ rubber insulation; cellulose acetate yarn braid; lacquered,
ed copper braid shield. Break-down voltage, 4000 volts. Outside
eter .117″. Wt., 100 ft., 1¼ lbs. **Available only in lengths shown.**

A 7779. 15-ft. Spool... 1.13 55 A 7780. 25-ft. Spool.....1.50
A 7781. 100-ft. Spool...4.50

COPPER BRAID SHIELDING AND BONDING CABLE

ible, braided and tinned copper for shielding con-
ors and cables. Braided in tubular form for easy
on. Av. shpg. wt. per 50 ft., 1½ lbs.

fr's ype	Oval Max. I.D.	Stranding	50-Ft. Spool	
			Stock No.	EACH
660	5/32″	96x34	55 A 9350	2.25
668	3/16″	120x34	55 A 9355	3.06
661	½″	192x34	55 A 9360	3.65
669	5/8″	336x34	55 A 9365	7.60
662	9/16″	576x34	55 A 9380	10.75
663	5/16″	160x34	55 A 9843	3.80

STRANDED AND SOLID ANTENNA WIRE

High-conductivity copper wire features maximum tensile strength, minimum stretch. Polythermaleze type insulation protects against mechanical abuse. Av. shpg. wt., 100-ft., 1 lb.

STRANDED BARE COPPER

Type 8000—7x22			Type 8002—7x24		
Stock No.	Spool	EACH	Stock No.	Spool	EACH
55 A 7680	50 ft.	1.32	55 A 7654	50 ft.	.96
55 A 7681	75 ft.	1.91			
55 A 7682	100 ft.	2.40	55 A 7656	100 ft.	1.65
55 A 7683	1000 ft.	21.90			

SOLID HEAVY POLYTHERMALEZE-INSULATED COPPER

Type 8008 No. 12			Type 8009 No. 14		
Stock No.	Spool	EACH	Stock No.	Spool	EACH
55 A 7670	100 ft.	4.50	55 A 7740	100 ft.	2.85
55 A 7661	150 ft.	6.40	55 A 7662	150 ft.	3.90
55 A 7736	500 ft.	19.80	55 A 7741	500 ft.	11.55

INDOOR ANTENNA WIRE

Type 8014. Extra flexible. No. 25 stranded (13x36), tinned copper conductor, with chrome vinyl plastic insulation. O.D., .044″. Shpg. wts.: 25-ft. spool, 2 oz.; 500-ft. spool, 2 lbs.

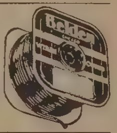
55 A 7930. 25-ft. .... .62
55 A 7933. 500-ft. 3.60

RADIO/MARINE ANTENNA WIRE

Type 8201. Tinned copperweld #20(7x28) antenna wire, for marine and other applications. Encased in brown weather resistant polyethylene. O.D., .278″. Shpg. wt. per 100 ft., 3½ lbs.

55 A 7663. 100-ft. Spool 4.50
55 A 7664. 500-ft. Spool 18.60

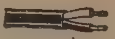
HEAVY POLYTHERMALEZE MAGNET WIRE



High temperature magnet wire for a wide variety of coil winding applications. Features heavy polythermaleze insulation; withstands winding abuse and forming operations; resists the solvent action of all types of thinners; resists softening and brittleness when used at extreme temperatures. Temperature rating, 180°C. Excellent moisture resistance.

½-lb. Spool				1-lb. Spool			
Stock No.	Size	Feet	EACH	Stock No.	Size	Feet	EACH
55 A 8036	14	40	1.29	55 A 8086	14	80	2.16
55 A 8037	16	63	1.29	55 A 8087	16	126	2.25
55 A 8038	18	100	1.32	55 A 8088	18	199	2.37
55 A 8039	20	157	1.35	55 A 8089	20	315	2.37
55 A 8040	22	250	1.37	55 A 8090	22	501	2.37
55 A 8041	24	396	1.41	55 A 8091	24	793	2.45
55 A 8042	26	630	1.49	55 A 8092	26	1260	2.61
55 A 8043	28	995	1.61	55 A 8093	28	1990	2.87
55 A 8044	30	1570	1.79	55 A 8094	30	3140	3.23
55 A 8045	32	2440	1.94	55 A 8095	32	4880	3.56
55 A 8046	34	3930	2.19	55 A 8096	34	7860	4.14
55 A 8047	36	6200	2.63	55 A 8097	36	12400	5.13
55 A 8048	38	9700	3.11	55 A 8098	38	19400	6.18
55 A 8049	40	16050	3.83	55 A 8099	40	32100	8.04

DUPLEX LIGHTING CABLE



Weatherproof 2-conductor stranded lighting cables for outdoor use only. Ideal for extending power lines to yard, garden, garage, barn, etc. Consist of two stranded, tinned copper, vinyl insulated conductors; one conductor brown vinyl, the other, red vinyl, running parallel through an oval-shaped, chrome vinyl outer jacket of .022″ thickness. Type 8677 is No. 16 AWG (19x29); O.D., .164x.276″. Type 8675 is No. 14 AWG (19x27); O.D., .189x.326″. Type 8673 is No. 12 AWG (19x25); O.D., .213x.384″. Av. shpg. wt., per 100 ft., 5 lbs.

Type	Stock No.	100 Ft.	Stock No.	500 Ft.
8677	55 A 7728	5.65	55 A 7729	26.55
8675	55 A 7730	7.45	55 A 7039 U	34.80
8673	55 A 7731	9.60	55 A 7042 U	46.80

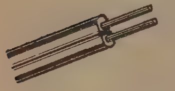
CATHODE-RAY-TUBE CABLE

High dielectric, corona resistant, minimum surface leakage CRT cables. No. 22 (7x30) tinned copper, polyethylene insulated. 8868 has red vinyl jacket; rated 25,000 V working; 50,000 V breakdown. 8869, black vinyl jkt.; 17,000 V; 35,000 V breakdown.

Mfr's Type	Insul.	Outside Diameter	100-Ft. Spool		
			Stock No.	Wt., Lbs.	EA.
8868	.065″	.150″	55 A 7770	1¾	2.93
8869	.029″	.120″	55 A 7773	1¼	2.43

Dearborn Wire and Cable

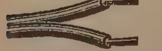
RUBBER (SP), PLASTIC (SPT) LAMP CORD



Two parallel No. 18 stranded copper wires for lamps and small appliances. Polarity ribbed. Meets U.L. requirements. 25-ft. and 100-ft. lengths. When ordering—**specify length.** Wt., per 100′, 3 lbs.

Mfr's Type	Jacket	Color	U.L. Type	25-Ft. Spool		100-Ft. Spool	
				Stock No.	EA.	Stock No.	EA.
SP	Rubber	Brown	SP-1	55 A 7983	1.31	55 A 7984	3.91
SP	Rubber	Black	SP-1	55 A 7998	1.31	55 A 7999	3.91
SPT	Vinyl	Brown	SPT-1	55 A 7988	1.23	55 A 7989	3.21
SPT	Vinyl	Black	SPT-1	55 A 7978	1.23	55 A 7979	3.21
SPT	Vinyl	Gray	SPT-1	55 A 8275	1.23	55 A 8289	3.21
SPT	Vinyl	White	SPT-1	55 A 7993	1.23	55 A 7994	3.21

"JUKE BOX" SPEAKER CABLE



Two parallel conductors of No. 24, 7x32 stranded wire—1 tinned, 1 bare. Vinyl insulation. O.D., .058x.115″. **In choice of gray or clear—specify color desired.** Shpg. wt., per 100′. 10 oz.

55 A 9905 C. 25-ft. Spool... .70 55 A 9906 C. 50-ft. Spool. . 1.05
55 A 9912 C. 100-ft. Spool. 1.56 55 A 9913 C. 500-ft. Spool. 5.18
55 A 9919 C. 1000-ft. Spool.......................... 10.35

MIL-W-76B THERMOPLASTIC HOOK-UP WIRE

Type MW heavy-duty, thermoplastic-insulated hook-up wire. Rated 1000 volts rms at 80°C. Tinned copper conductor with polyvinylchloride insulation; wall thickness. .016″. **In choice of brown, red, orange, yellow, green, white, black, gray, violet or blue—specify color.** Av. shpg. wt., 25′ spool, 6 oz.; 100′ spool, 1 lb.

Size	Strands	Nom. O.D.	25-Ft. Spool		100-Ft. Spool	
			Stock No.	EACH	Stock No.	EACH
#22	7x30	.056″	55 A 9723 C	.58	55 A 9724 C	1.39
#22	solid	.051″	....	......	55 A 9735 C	1.17
#20	7x28	.064″	55 A 9726 C	.65	55 A 9727 C	1.58
#20	solid	.058″	....	......	55 A 9737 C	1.40
18	16x30	.075″	55 A 9729 C	.77	55 A 9730 C	1.98
16	19x29	.091″	55 A 9732 C	.97	55 A 9733 C	2.66

ASSORTED RADIO-TV HOOK-UP WIRE

Stranded, and solid copper—some tinned and some untinned. Resistant to heat and moisture. Offers high conductivity with negligible loss. In assorted gauges, colors and types of insulation. Unlimited number of applications in chassis and subchassis wiring of radio and television receivers, transmitters, high-fidelity and public address equipment, kit building, etc.

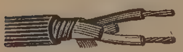
55 A 9344. Six 25-ft. Coils. Shpg. wt., 1 lb........... Per Pkg. 1.45
55 A 9345. Five 100-ft. Coils. Shpg. wt., 2½ lbs....... Per Pkg. 3.35

FLEXIBLE TEST-PROD WIRE

Limp, rubber-covered wire ideal for test leads. Designed to withstand extremely high voltages; puncture test voltage, 12,000 volts. Insulation thickness, .046″. No. 20 conductor is 41x36 stranded. O.D., .137″. **Choice of red or black in 100-ft. spools only.** Wt., 2 lbs.

55 A 9474. Red. 100-ft. Spool.......................... Each 3.35
55 A 9475. Black. 100-ft. Spool......................... Each 3.35

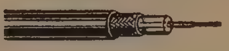
RUBBER-JACKETED SERVICE CORD



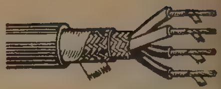
Quality-made, rubber-sheathed service cord. Stranded copper conductors have rubber insulation with black rubber jackets. Excellent for a wide variety of applications, including household appliances, garden and power tools, or wherever rough-usage extension cords are required. All types meet U.L. requirements and have maximum voltage ratings of 300 volts except types S #14 and S #10, 600 volts. Current capacity in amperes: SV #18 and SJ #18, 5 amps; SJ #16 (2 and 3 cond. types), 7 amperes; S #14, 15 amperes; S #10, 25 amperes. Available in standard 25′, 50′ and 100′ spools only—**specify spool length desired.** *No. of conductors. Av. shpg. wt., 100′ spool, 3 lbs.

U.L. Type	Ga.	*	O.D.	25-Ft. Spool		50-Ft. Spool		100-Ft. Spool	
				Stock No.	EA.	Stock No.	EA.	Stock No.	EA.
SV	#18	2	.250″	55 A 8336	1.95	55 A 8337	2.65	55 A 8349	5.29
SJ	#16	2	.330″	55 A 8353	2.50	55 A 8354	4.57	55 A 8361	9.14
SJ	#18	3	.330″	55 A 8380	5.00	55 A 8381	5.04	55 A 8382	10.08
SJ	#16	3	.360″	55 A 8384	4.05	55 A 8438	7.15	55 A 8450	14.30
S	#14	3	.560″	55 A 8628	10.85	55 A 8629	11.37	55 A 8630	22.74
S	#10	3	.690″	55 A 8631	14.50	55 A 8632	19.58	55A8633U	39.15

MICROPHONE CABLE



Single-Conductor



Multiple-Conductor

Plastic and rubber-jacketed mike cable with tinned, stranded copper conductors. All have tinned copper braided shield except *tinned copper spiral shield. Plastic-jacketed types have plastic insulation and rubber-jacketed types, rubber insulation. Multiple-conductor types are color coded. Single-conductor type is especially suitable for lapel or lavalier mikes; 2-conductor types, for low-impedance mikes; 6-conductor type, for power supply cable. †No. Conductors. Av. shpg. wt.: 25′ spool, 1 lb.; 100′ spool, 6 lbs.

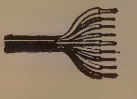
PLASTIC JACKET

†	Size	O.D.	WV DC	25-Ft. Spool		50-Ft. Spool		100-Ft. Spool	
				Stock No.	EA.	Stock No.	EA.	Stock No.	EA.
1*	#22	.155″	2500	55 A 9420	1.49	55 A 9421	2.90	55 A 9422	5.20
2	#22	.231″	600	55 A 9423	3.55	55 A 9424	6.75	55 A 9425	10.35

RUBBER JACKET

†	Size	O.D.	WV DC	100-Ft. Spool		250-Ft. Spool		500-Ft. Spool	
				Stock No.	EA.	Stock No.	EA.	Stock No.	EA.
2	#20	.268″	600	55 A 9427	11.66	55 A 9428	28.25	55A9429U	56.30
6	#20	.349″	600	55 A 9430	23.30	55 A 9431 U	55.55	....	.....

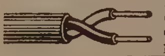
MULTIPLE-CONDUCTOR INTERCOM CABLE (Not Paired)



Quality plastic-jacketed cable with multiple, non-paired, plastic insulated conductors. Excellent for permanent installation of speakers, control and intercom circuits, and other applications. Conductors are of No. 22 stranded copper wire; all are color-coded. Conductors have .010 insulation; grey jacket has .020.

No. Cond.	Nom. O.D.	Lbs. 100′	25-Ft. Spool		50-Ft. Spool		100-Ft. Spool	
			Stock No.	EA.	Stock No.	EA.	Stock No.	EA.
3	.145″	2	55 A 9850	1.45	55 A 9851	2.50	55 A 9458	3.84
4	.170″	2¼	55 A 9852	2.00	55 A 9853	3.25	55 A 9854	4.80
5	.175″	2½	55 A 9855	2.10	55 A 9856	3.30	55 A 9857	5.88
6	.185″	3	55 A 9858	3.25	55 A 9859	5.55	55 A 9860	7.80
8	.200″	3¼	55 A 9861	3.90	55 A 9862	5.90	55 A 9461	9.86

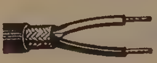
PAIRED UNSHIELDED INTERCOM CABLE (JACKETED)



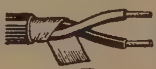
For intercom and telephone wiring. Color-coded conductors are No. 22 solid copper, cabled in twisted pairs with high-dielectric plastic jacket overall.

No. Cond.	Nom. O.D.	Lbs. 100′	25-Ft. Spool		50-Ft. Spool		100-Ft. Spool	
			Stock No.	EA.	Stock No.	EA.	Stock No.	EA.
2 (1 pr.)	.130″	1½	55 A 9863	1.56	55 A 9864	2.65	55 A 9453	4.26
6 (3 pr.)	.220″	3½	55 A 9865	2.75	55 A 9866	4.55	55 A 9867	6.00
8 (4 pr.)	.255″	4	55 A 9868	3.95	55 A 9869	6.00	55 A 8772	9.55

SHIELDED PLASTIC INTERCOM CABLE



A



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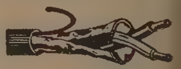


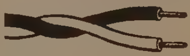
C

Two-conductor shielded cable for intercoms, sound and PA systems. All have plastic jackets with color-coded conductors. Fig. A has tinned copper shield; Fig. B, spiral-type tinned copper shield; Fig. C, aluminum-wrapped shield with ground wire.

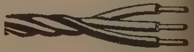
Size	Nom. O.D.	Fig.	Lbs. 100′	25-Ft. Spool		50-Ft. Spool		100-Ft. Spool	
				Stock No.	EA.	Stock No.	EA.	Stock No.	EA.
#22	.185″	A	4	55 A 9876	2.45	55 A 9877	4.15	55 A 9878	6.81
#22	.195″	C	1½	55 A 9879	2.10	55 A 9880	3.15	55 A 9442	4.80
#20	.210″	C	3	55 A 9881	2.30	55 A 9467	3.90	55 A 9468	5.25
#20	.195″	B	3½	55 A 9882	2.35	55 A 9438	4.00	55 A 9440	5.46
#22	.175″	B	3	55 A 9883	2.05	55 A 9432	3.05	55 A 9433	5.25

PAIRED UNSHIELDED INTERCOM CABLE (UNJACKETED)

D



E

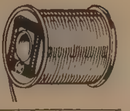


For speakers, alarm systems and other electronic applications. Conductors are No. 22 solid copper, plastic insulated and individually color-coded. Av. shpg. wt., 100′ spool, 1¼ lbs.

No. Cond.	O.D.	Fig.	25-Ft. Spool		50-Ft. Spool		100-Ft. Spool	
			Stock No.	EA.	Stock No.	EA.	Stock No.	EA.
2	.112″	D	55 A 9870	1.07	55 A 9871	1.50	55 A 9455	2.49
3	.132″	E	55 A 9872	1.52	55 A 9873	2.15	55 A 9874	3.27

Dearborn Wire and Cable

PLAIN ENAMELED MAGNET WIRE



nel-insulated, soft-drawn copper wire. Espe- ' manufactured for all types of coil winding cations—transformers, RF coils, chokes, etc. ;izes are standard B&S gauge. **Available in** **ınd spools only.** Average shipping weight, pool, 1 lb. 4 oz.

tock No.	Size	Feet	Per Spool	Stock No.	Size	Feet	Per Spool
A 9995	#36	12 800	3.17	55 A 9990	#26	1200	2.02
A 9994	#34	7950	2.60	55 A 9989	#24	798	1.89
A 9993	#32	4900	2.39	55 A 9986	#22	501	1.69
A 9992	#30	3200	2.27	55 A 9979	#20	313	1.61
A 9991	#28	1999	2.21	55 A 9978	#18	198	1.56

HEAVY FORMVAR MAGNET WIRE

ɔer magnet wire covered with Formvar; a tough, abrasion- :ing film. Stable dielectric is maintained under cumulative ıg and aging effects of heat—does not fail after two hours at C. Resists acid and alkali, impervious to effects of petroleum ·nts. Infinite moisture resistance. Takes little winding space. many applications for technical service and industrial work. ially useful in transformers, chokes, transmitters, and the r and construction of electric motors. Replaces enamel, r, cotton, silk, double cotton and double silk. **Available in** **spools only.** Av. shpg. wt., 1 lb. 4 oz.

Stock No.	Size	Feet	PER SPOOL
55 A 8661	#26	1200	3.30
55 A 8365	#24	798	2.84
55 A 8265	#22	501	2.64
55 A 8258	#20	313	2.38

ASSORTED AUTOMOTIVE PRIMARY WIRE

Handy assortment of primary wire for automobile and boating applications. Each package includes five 25-foot coils of stranded No. 14 and No. 16 gauge wire in a variety of colors. Tough, colorful outer insulation permits quick identification of wiring systems and adds distinction to engine appearance in car or boat. This automotive wire resists flame, oil, gasoline, grease, acid, fungus, moisture absorption, and most solvents. Has high temperature stability and remains flexible at low temperatures. Automotive wiring applications include: horn button, radio, headlights, stop lights, tail lights, gasoline gauges, primary of distributor to primary of coil, cigarette lighter, heater, starter to generator or switch to starter. **Package includes five 25-ft. coils.** Shpg. wt., 1½ lbs.
55 A 9875 .... **Per Pkg. 3.45**

TINNED BUS-BAR WIRE

Finest quality, soft-drawn solid copper wire. Tinned for easy soldering. Well suited for making non-insulated hookups in all types of electronic equipment. Excellent choice for grounding and tie-in circuits in high-fidelity and PA amplifiers. 18-gauge and 20-gauge types suitable for shortwave antennas.

Size	O. D.	100-Ft. Spool			1000-Ft. Spool		
		Stock No.	Lbs.	EACH	Stock No.	Lbs.	EACH
#26	.016″	55 A 7059	¼	.71	55 A 7053	1	3.45
#24	.020″	55 A 9183	¼	.73	55 A 9149	1½	3.75
#22	.025″	55 A 9168	¼	.75	55 A 9159	2¼	4.45
#20	.032″	55 A 9173	½	.88	55 A 9161	3½	6.10
#18	.040″	55 A 9178	¾	1.15	55 A 9163	5¼	8.55

75-OHM LOW-LOSS FOAM-TYPE COAXIAL CABLE FOR COLOR TV

9/U-Type. Recommended by manufacturers as best antenna :in for color TV. Impedance, 75 ohms. Moisture resistant poly- dielectric keeps moisture out, reduces signal loss by 35%, and 'es better picture quality. Ends strip quickly for connection to antenna and set. Suitable for Amateur and Citizens Band applications. Use Series TNC, BNC, BN, C, UHF, N, and push-on connectors. Per 100 ft., 4 lbs.
55 A 9363. 50-Ft. **3.95**
55 A 9352. 100-Ft. .... **5.67** **55 A 9353.** 500-Ft. **22.82**

LOW-LOSS FOAM-TYPE RG COAXIAL CABLE

ı construction for extremely low loss. Features cellular poly- ene inner dielectric which reduces signal attenuation by as ı as 35% over standard RG coax. Excellent choice for use in nunity TV installations, and many other UHF and VHF transmitting and receiving applications. Type RG-8/U uses series N, C, HN and UHF-type connectors; Type RG-58/U uses series TNC, BNC, BN, C, UHF, N and push-on connectors. Both types listed have bare copper conductor.

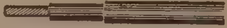
ype	Imp. Ohms	Conductor	O. D.	pF per Ft.	Lbs. per 100′	50-Ft. Spool		100-Ft. Spool		500-Ft. Spool		1000-Ft. Spool	
						Stock No.	EA.	Stock No.	EA.	Stock No.	EA.	Stock No.	EA.
8/U	50	13 (7x21)	.405″	26.0	10½	55 A 9354	7.50	55 A 9342 X	14.30	55 A 9343 X	58.12	55 A 9346 X	116.24
·58/U	53.5	20 solid	.195″	28.5	3	55 A 9357	3.50	55 A 9347	5.67	55 A 9348 X	22.05	55 A 9349 X	43.94

STANDARD RG HIGH-FREQUENCY COAXIAL CABLE

ʒed, high-quality coaxial cable for RF transmission line, antenna in, test equipment leads, and similar communications uses. ıave an efficient, low-loss, polyethylene inner dielectric. Outer ic jackets are virtually impervious to acids, alkalis, oils, ıicals, humidity and weathering effects—suitable for underground applications. RG-8/U and RG-11/U types are for series N, C, HN and UHF connectors; RG-58/U and RG-59/U are for series TNC, BNC, BN, C, UHF, N and push-on connectors. RG-8/U and RG-58/U have bare copper conductors. RG-11/U has tinned copper conductor. RG-59/U has bare copperweld conductor.

ype	Imp. Ohms	Conductor	O. D.	pF per Ft.	Lbs. per 100′	25-Ft. Spool		50-Ft. Spool		100-Ft. Spool		500-Ft. Spool	
						Stock No.	EA.	Stock No.	EA.	Stock No.	EA.	Stock No.	EA.
-8/U	50	13 (7x21)	.405″	29.5	10½	55 A 9886	4.70	55 A 9887	7.50	55 A 9300	12.98	55 A 9301 X	55.13
-11/U	75	18 (7x26)	.405″	20.5	10	55 A 9888	4.75	55 A 9889	7.50	55 A 9303	11.20	55 A 9304 X	47.43
-58/U	53.5	20 solid	.195″	28.5	3	55 A 9894	2.00	55 A 9897	3.10	55 A 9307	4.68	55 A 9308 X	18.26
-59/U	73	22 solid	.242″	21.0	4	55 A 9848	2.40	55 A 9849	3.50	55 A 9310	5.45	55 A 9311 X	19.91

7mm IGNITION WIRE



ially designed for spark plug connections. Single conductor ·ed, stranded copper with high dielectric insulation. Available ɔur choice of two types: select the black neoprene jacket for 'e operating conditions in automobiles, boats and trucks; ıse clear polyvinylchloride insulation for standard duty use on all cars, boats and trucks. The clear jacket also provides a "dress up" appearance for the motor in "Hot Rods," racing cars, and custom motors. Available in 50, 100 and 500-ft. spools. Shpg. wts.: 50 foot spools, 2 lbs.; 100-foot spools, 4 lbs.; 500-foot spools, 9 lbs.

Insulation	Size	O. D.	Wall Size		Color	50-Ft. Spool		100-Ft. Spool		500-Ft. Spool	
			Inner	Outer		Stock No.	EACH	Stock No.	EACH	Stock No.	EACH
ɔer and Neoprene	#16 Stranded	.276″	.075″	.032″	Black	55 A 8601	5.30	55 A 8603	9.55	55 A 8514	43.50
vinylchloride	#20 Stranded	.269″	.116″	....	Clear	55 A 8602	5.30	55 A 8513	8.95	55 A 8515	38.50
vinylchloride	#20 Stranded	.269″	.116″	....	Red	55 A 8460	5.45	55 A 8461	8.95	55 A 8462	38.50

AUTOMOTIVE AND MARINE WIRE

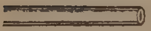
ifically designed for electrical connections in autos, trucks, and s. Single conductor, stranded bare copper primary wire with '-coded polyvinylchloride insulation. Resists the damaging effects of flame, oil, gasoline, grease, acid and fungus. Also impervious to the deterioration caused by most solvents.

onductor		O. D.	Wall Size	Color	Lbs. per 100′	50-Ft. Spool		100-Ft. Spool		500-Ft. Spool	
e	Strands					Stock No.	EACH	Stock No.	EACH	Stock No.	EACH
6	19x29	.102″	.102″	Brown	1¼	55 A 8604	1.80	55 A 8615	2.30	55 A 8608	10.50
4	19x27	.117″	.023″	Green	2	55 A 8605	2.50	55 A 8616	3.20	55 A 8619	14.75
2	19x25	.142″	.026″	Red	3	55 A 8606	2.70	55 A 8617	3.80	55 A 8620	17.95
)	19x23	.175″	.031″	Black	4¼	55 A 8607	3.90	55 A 8618	5.75	55 A 8621 X	27.00

Tubing, Wire, Cable, Wire Markers and Heat Guns

ALPHA SHRINKABLE TEFLON TUBING

PVC 105 PLASTIC TUBING



Plastic tubing features high tensile strength per MIL-1-631D, ASTM-D876, ASTM-D922 (Type F, Form U, Grade C, Class 1, Category 1) specs. Available in sizes 24 to 12. Designed for general electronic, aircraft, electrical uses. Available in choice of Clear, Black or Red—specify color when ordering. Av. wt. per 100 ft., 5 oz.

Stock No.	Size	Nom. I.D.	Nominal Wall Thick.	Per 100-ft. Coil
55 A 9269 C	24	.022"	0.012"	2.43
55 A 9270 C	22	.027"	0.012"	2.44
55 A 9271 C	20	.034"	0.016"	2.49
55 A 9272 C	18	.042"	0.016"	2.58
55 A 9273 C	16	.053"	0.016"	2.72
55 A 9274 C	14	.066"	0.016"	2.89
55 A 9275 C	12	.085"	0.016"	3.07

Sizes 10 to 2. Available in choice of Clear, Black, Red—specify color. Av. shpg. wt., per 100 ft., 10 oz.

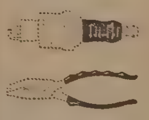
55 A 9281 C	10	.106"	.016"	3.27
55 A 9282 C	8	.133"	.020"	4.57
55 A 9283 C	6	.166"	.020"	5.19
55 A 9284 C	4	.208"	.020"	6.00
55 A 9285 C	2	.263"	.020"	6.91

FIT-105 FLEX TUBING

Irradiated polyvinylchloride (PVC) provides snug, flexible insulation. Excellent for insulation over splices. Supplied at "Min. I.D." size shrinks to "Recov. I.D." size in only 7 seconds when heated to 325° F. Supplied in black only. **Write, Wire or Phone for Quantities Larger Than Those Listed.**

Size	Min. I.D.	Recov. I.D.	Wall Thick.	Stock No.	Wt., Lbs.	Per 25′ Coil
3/64"	.046"	.023"	.020"	55 A 8635	.1	2.40
1/16"	.062"	.031"	.020"	55 A 8646	.1	2.55
3/32"	.093"	.046"	.020"	55 A 8637	.1	2.95
1/8"	.125"	.062"	.020"	55 A 8638	.2	3.10
3/16"	.178"	.093"	.025"	55 A 8639	.3	3.80
1/4"	.250"	.125"	.025"	55 A 8640	.4	4.80
3/8"	.375"	.178"	.030"	55 A 8641	.5	5.30
1/2"	.500"	.250"	.030"	55 A 8642	.8	6.00
3/4"	.750"	.375"	.035"	55 A 8643	1.3	8.05
1"	1.000"	.500"	.040"	55 A 8644	2.2	11.60
1½"	1.500"	.750"	.045"	55 A 8645	3.9	19.05
2"	2.000"	1.000"	.050"	55 A 8646	4.5	28.05

SHRINKABLE TUBING ASSORTMENT



Shrinks to Cover Irregular Shapes

Type PVC FIT-105-MS-1 Assortment. Irradiated polyvinylchloride. Provides snug, flexible insulation for cable jacketing, cable markers. Use as insulation over splices. Supplied at "Min. I.D." size; shrinks to "Recov. I.D." in only 7 seconds when heated to 325°F. Black. Each tube 10" long. Includes ten each: 3/64, 1/16, 3/32, 1/8, 3/16, 1/4" dia. (listed above). Shpg. wt., 8 oz.

55 A 8658........................4.00

55 A 8659. FIT-105-MS-2 Assortment. Each tube 10" long. Includes ten 6" lengths each of four sizes from 3/8" through 1" (forty pieces). Black only. Shpg. wt., ½ lb..............................8.00

TALK-A-PHONE INTERCOM CABLE

No. Cond.	Mfr's Type	Lbs. 100′	50 Roll Stock No.	50 Roll EA.	100′ Roll Stock No.	100′ Roll EA.	200′ Roll Stock No.	200′ Roll EA.
6	5506	3½	55 A 8063	5.50	55 A 8067	11.00	55 A 8068	22.00
11	9911	12	55 A 8064	10.50	55 A 8073	21.00	55 A 8074	42.00

MASTER HEAT GUNS

Two heat-gun models that feature delivery of controlled heat up to 1000 degrees Fahrenheit without the danger of an open flame. Perfect for use with "shrinkable" tubing, forming plastics, and forced drying. Mfr's Type HG-501 produces heat from 500 to 750 degrees Fahrenheit, and Mfr's Type HG-751 from 750 to 1000 degrees Fahrenheit. For 115-120 volts, 60 Hz AC. Shpg. wt., 5 lbs.

55 A 8576. Type HG-501. 14 amps..............................49.90
55 A 8574. Type HG-751. 20 amps..............................59.95

CONSOLIDATED WIRE AND CABLE

INTERIOR AND EXTERIOR TELEPHONE WIRE

No. 22 solid, tinned copper wire. Interior: 1/32" insulation, cotton braid. Exterior black rubber, weatherproof braid.

Conductors	Stock No.	100′ Coil	Stock No.	500′ Coil	Stock No.	1000′ Coil
2 Int.	55 A 8362	5.50	55 A 8363	25.90	55 A 8364	51.5
2 Ext.	55 A 8752	5.24	55 A 8760	24.20	55 A 8761	47.2
3 Ext.	55 A 8175	7.90	....	..	.....	.....

STEREO PHONO PICKUP ARM CABLE

Type 1478 unshielded; 1479 braided tinned copper shield. No. 32 (7x40) copper 2 conductor cable with .009" vinyl plastic insulation. O.D., .055". Av. wt.: 10′ spool, 4 oz.; 25′, 6 oz.; 250′, 1 lb

Mfr's Type	25-Ft. Spool Stock No.	25-Ft. Spool EACH	250-Ft. Spool Stock No.	250-Ft. Spool EACH
1478	55 A 8524	.72	55 A 8525	5.84
1479	55 A 8536	1.42	55 A 8537	8.98

PUSH-BACK HOOK-UP WIRE

STA-PUT WIRE

Tinned hook-up wire. No. 20. Pure coppe wire; insulation easily pushed back. Available in both solid and stranded type Double-cotton covered with paraffin-treated damp-proof braid. 5 different colors Wt., 25 ft., 4 oz.; 100 ft., 1 lb.

STRANDED TYPE, 10x30

Spool	Red	Black	Yellow	Blue	Green	EA.
25 ft.	55 A 8442	55 A 8440	55 A 8444	55 A 8441	55 A 8443	.5
100 ft.	55 A 8447	55 A 8445	55 A 8449	55 A 8446	55 A 8448	2.0

SOLID TYPE

Spool	Red	Black	Yellow	Blue	Green	EA.
25 ft.	55 A 8472	55 A 8470	55 A 8474	55 A 8471	55 A 8473	.4
100 ft.	55 A 8477	55 A 8475	55 A 8479	55 A 8476	55 A 8478	1.7

HEATER CORD

Black and white marker heater cord 2 conductor, U.L. type HPD. Nominal insulation thickness 1/32". Idea for all heater cord applications.

Mfg. Type	Size	Strd.	O. D. (In.)	Stock No.	100′ Coil	Stock No.	250′ Coil
4087	16	65x34	.275	55 A 8747	8.22	55 A 8850	20.09
4092	18	41x34	.250	55 A 8898	7.47	55 A 8899	18.02

TINNED COPPER BUS BAR WIRE

High quality aerial and bus bar solid tinned wire Solid soft drawn copper and brightly tinned for al types of soldering connections and excellent for applications requiring a conductor for heavy current. Standard spool put-up, 100-ft., and 1000-ft.

Mfr's Type	AWG (In.)	O. D.	100-ft. Spool Stock No.	100-ft. Spool Lbs.	100-ft. Spool EA.	1000-ft. Spool Stock No.	1000-ft. Spool Lbs.	1000-ft. Spool EA.
3848	30	.010	55 A 8550	.3	.62	55 A 8551	.9	2.47
3847	28	.013	55 A 8560	.3	.62	55 A 8573	1.0	2.78
3846	26	.016	55 A 8581	.4	.62	55 A 8582	1.3	3.0
3819	24	.020	55 A 8583	.3	.63	55 A 8584	1.3	3.31
3818	22	.025	55 A 8585	.3	.67	55 A 8586	2.0	3.86
3817	20	.032	55 A 8588	.4	.77	55 A 8589	3.6	5.32
3816	18	.040	55 A 8590	.5	1.00	55 A 8591	5.0	7.54
3815	16	.051	55 A 8592	.8	1.46	55 A 8593	8.0	12.04

BRADY SELF-STICKING WIRE MARKERS

Self-sticking, preprinted ½" long (1½") markers for permanent identification of wires and cables under .150" Provide positive coding of circuits panels, etc. Resists heat (to 250° F oil solvents. Thin for confined area Stocked in cards of consecutive numbers or letters. Shpg. wt., 1 oz.

Stock No.	Description	Markers per Card	PER CARD
55 A 7009	Consecutive numbers 0-49	150	.27
55 A 7010	Consecutive numbers 50-99	150	.27
55 A 7011	Consecutive numbers 100-132	99	.27
55 A 7012	Consecutive numbers 133-165	99	.27
55 A 7013	Consecutive numbers 166-198	99	.27
55 A 8395	Consecutive letters A-Z*	26	.20

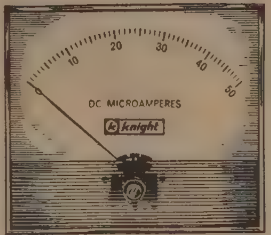
Knight and Emico Panel Meters

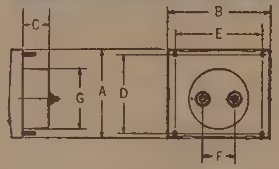
ALLIED'S OWN KNIGHT® AC AND DC PANEL METERS

- hoice of 2½", 3½" or 4½" Square Meters
- ompletely Shielded Meter Movements
- Easy Reading, Knife-Edge Pointer
- Complete With All Hardware

ed's own full line of Knight panel meters. ese dependable low-cost, clear-view ers are styled to give your equipment a dern appearance. Feature completely lded meter movements in both AC and models—can be mounted on ferrous els without loss of accuracy. Modern face, knife-edge pointer and crystal-clear plastic cover for easy reading. All mounting and terminal hardware is included for easy installation. Choice of 2½", 3½" or 4½" size—dimensions shown in table at right, below. Terminals: ¼-28x.42". Mounting studs: ½". Av. shpg. wt., 1 lb.

Range	2½" Square Meter		3½" Square Meter		4½" Square Meter	
	Stock No.	EACH	Stock No.	EACH	Stock No.	EACH
0-50 µA DC	52 A 6726	17.65	52 A 7201	18.00	52 A 7205	19.40
0-100 µA DC	52 A 6728	15.70	52 A 7202	16.55	52 A 7206	18.35
0-200 µA DC	52 A 6730	14.40	52 A 7203	15.10	52 A 7207	16.55
25-0-25 µA DC	52 A 6725	17.75	52 A 7204	18.10	52 A 7208	19.55
0-1 mA DC	52 A 6731	13.70	52 A 7209	14.15	52 A 7214	15.10
0-3 mA DC	52 A 6732	13.70	52 A 7210	14.15	52 A 7215	15.10
0-15 mA DC	52 A 6734	13.70	52 A 7211	14.15	52 A 7216	15.10
0-100 mA DC	52 A 6737	13.90	52 A 7212	15.40	52 A 7217	15.70
0-200 mA DC	52 A 6738	13.90	52 A 7213	15.40	52 A 7218	15.70
0-10 amps DC	52 A 6741	13.90	52 A 7225	15.40	52 A 7227	15.70
0-15 amps DC	52 A 6742	13.90	52 A 7226	15.40	52 A 7228	15.70
0-15 V DC	52 A 6746	14.50	52 A 7275	15.10	52 A 7276	16.55
0-50 V DC	52 A 6748	14.50	52 A 7219	15.10	52 A 7222	16.55
0-100 V DC	52 A 6749	14.50	52 A 7220	15.10	52 A 7223	16.55
0-150 V DC	52 A 6750	14.50	52 A 7221	15.10	52 A 7224	16.55
0-5 amps AC	....	....	52 A 7340	13.20	52 A 7342	15.35
0-10 amps AC	....	....	52 A 7341	14.00	52 A 7343	15.35
0-150 V AC	52 A 6752	17.40	52 A 7229	15.80	52 A 7231	16.70
0-300 V AC	52 A 6753	17.40	52 A 7230	15.80	52 A 7232	16.70





Dim.	2½"	3½"	4½"
A	2.38"	3.00"	4.00"
B	2.59"	3.44"	4.68"
C	1.06"	1.19"	1.19"
DxE	1.88"	2.25"	3.56x4.00"
F	1.40"	1.40"	1.40"
G	2.18"	2.75"	2.75"

EMICO LOW-COST PANEL METERS—ACCURATE WITHIN 5%

DC MILLIAMMETERS

	Model NF-2C		Model RF-2C		Model RF-2¼C		Model 13	
nge	Stock No.	EACH	Stock No.	EACH	Stock No.	EACH	Stock No.	EACH
	52 A 7609	4.05	52 A 7614	4.05	52 A 8012	4.20	52 A 6023	4.05
	52 A 8970	3.00	52 A 8971	3.00	52 A 6022	3.15	52 A 6024	3.25
0	52 A 7600	2.85	52 A 7615	2.85	52 A 8013	3.00	52 A 6025	3.10
0	52 A 7601	2.50	52 A 7616	2.50	52 A 8014	2.75	52 A 6026	2.85
0	52 A 7602	2.50	52 A 7617	2.50	....	....	....	....
0	52 A 7603	2.50	52 A 7618	2.50	52 A 8016	2.75	52 A 6028	2.85
00	52 A 7604	2.50	52 A 7619	2.50	52 A 8017	2.75	52 A 6029	2.85
50	52 A 7605	2.50	52 A 7620	2.50	52 A 8018	2.75	52 A 6030	2.85
00	52 A 7606	2.50	52 A 7621	2.50	52 A 8019	2.75	52 A 6031	2.85
00	52 A 7607	2.50	52 A 7622	2.50	52 A 8020	2.75	52 A 6032	2.85
00	52 A 7608	2.50	52 A 7623	2.50	52 A 8021	2.75	52 A 6033	2.85

AC VOLTMETERS

	Model NF-2C		Model RF-2C		Model RF-2¼C		Model 13	
5	52 A 7665	3.70	52 A 7670	3.70	52 A 8022	3.90	52 A 6034	4.00
0	52 A 8978	3.70	52 A 8979	3.70	52 A 6038	3.90		......
50	52 A 7666	4.25	52 A 7671	4.25	52 A 8023	4.60	52 A 6035	4.65
00	52 A 7667	4.80	52 A 7672	4.80	52 A 8024	5.10	52 A 6036	4.95

DC AMMETERS

	Model NF-2C		Model RF-2C		Model RF-2¼C		Model 13	
	52 A 8972	2.40	52 A 8973	2.40	52 A 8025	2.85	....	....
	52 A 8974	2.40	52 A 8975	2.40	52 A 6043	2.85	....	....
0	52 A 7650	2.40	52 A 7656	2.40	52 A 6044	2.85	52 A 6070	2.85
5	52 A 6039	2.40	52 A 6041	2.40	52 A 6045	2.85	52 A 6073	2.85
5	52 A 8976	2.40	52 A 8977	2.40	52 A 6046	2.85	....	....
0	52 A 6040	2.40	52 A 6042	2.40	52 A 6047	2.85	52 A 6080	2.85
-3	52 A 7651	2.40	52 A 7657	2.40	....	....	....	....
-20	52 A 7652	2.40	....	....	52 A 8027	2.85	52 A 6082	2.85
-30	52 A 7653	2.40	52 A 7659	2.40	52 A 8028	2.85	52 A 6083	2.85

DC VOLTMETERS

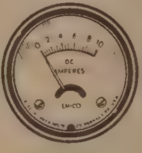
	Model NF-2C		Model RF-2C		Model RF-2¼C		Model 13	
	52 A 7630	2.50	52 A 7635	2.50	52 A 8082	2.75	52 A 6168	2.85
3	52 A 7631	2.50	52 A 7636	2.50	52 A 8083	2.75		......
	52 A 7632	2.50	52 A 7637	2.50	52 A 8084	2.75	52 A 6188	2.85
	52 A 6090	2.50	52 A 6169	2.50	52 A 6092	2.75	52 A 6189	2.85
	52 A 6091	2.50	52 A 6193	2.50	52 A 6093	2.75	52 A 6190	2.85
	52 A 8980	2.50	52 A 8981	2.50	52 A 6096	2.75	52 A 6191	2.85
	52 A 8982	2.50	52 A 8983	2.50	52 A 6097	2.75	52 A 6192	2.85

AC AMMETERS

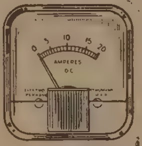
	Model NF-2C		Model RF-2C		Model RF-2¼C		Model 13	
	52 A 8984	3.70	52 A 8985	3.70	....	....	....	....
	52 A 7646	3.70	52 A 7648	3.70	52 A 8085	3.90	52 A 6195	4.00
	52 A 7647	3.70	52 A 7649	3.70	52 A 8086	3.90	....	....

AC MILLIAMMETERS

	Model NF-2C		Model RF-2C		Model RF-2¼C		Model 13	
0	52 A 7640	3.70	52 A 7643	3.70	52 A 8029	3.90	52 A 6212	4.00



NF-2C



RF-2¼C

0
10
20
30
40
50
DC VOLTS

RF-2C

DC MILLIAMPERES
0
1
2
3
4
5

13 Edgewise

- 5% Accuracy, Even in Magnetic Metal Panels
- "Hi-Tork" DC and Moving-Iron AC Movements
- Black Enameled or Zinc Iridite Steel Cases

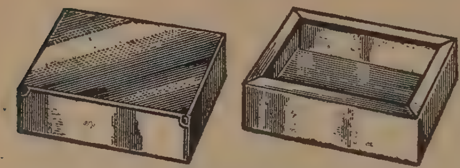
Offer accuracy and prestige appearance. DC meters have "HI-TORK" magnetic movements; AC meters, moving-iron movements. Work trouble-free even under severe conditions. Calibrated in steel cases, meters need no further adjustments. 5% accuracy is not affected by mounting in magnetic metal panels. Black-enameled or zinc-iridite steel cases. Dimensions (overall depth and flange size): Model NF-2C, 1¼x2¼"; Model RF-2C, 1⅝x2¼"; Model RF-2¼C, 1⁹⁄₁₆x2⁵⁄₁₆"—each model fits in 2¹⁄₁₆" diameter hole; Model 13 (all plastic), ¾x1¹³⁄₁₆x2⅛". Screw-terminal binding posts and/or lugs for solder connections. With mounting hardware. Av. shpg. wt., 9 oz.

All Meters Are Calibrated in Steel Panels—Precision Accuracy Is Not Affected by Metal Panels

CHOOSE FROM OUR GIANT STOCK OF PANEL METERS

Allied offers the largest selection of panel meters found anywhere. Knight, Simpson, Triplett, API, and Emico meters are stocked in depth. Write for information on any meter application.

Bud Metal Products and Davies Plastic Cases



STANDARD CHASSIS BASES

Have one-piece construction; corners are reinforced and spot-welded. The four sides are folded at the bottom for additional strength. Aluminum types are spot-welded. Steel chassis gauges: *No. 22; †No. 20; §No. 18. Aluminum chassis gauges: ‡No. 18; **No. 16; ††No. 14. Order bottom plates, below. AC-403: 2x9½x5″.

Allied stocks the complete line of Bud Metal Products for immediate shipment. Bud items not listed in this catalog are available from Allied. Contact us for prices or other information.

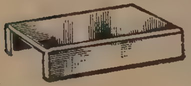
HxWxD Inches	Black-Wrinkle Steel				Zinc-Plated Steel				Natural-Finish Aluminum			
	Stock No.	Type	Lbs.	EACH	Stock No.	Type	Lbs.	EACH	Stock No.	Type	Lbs.	EACH
2x7x5	42 A 7820	CB-628*	1	1.40	42 A 7884	CB-629*	1	1.80	42 A 7846	AC-402‡	½	1.70
2½x9½x5	42 A 7821	CB-644*	1¼	1.80	42 A 7898	CB-645*	1¼	2.30	42 A 7847	AC-403‡	½	1.80
3x7x5	....	....	....	....	....	....	....	....	42 A 7905	AC-429**	¾	1.90
3x9½x5	....	....	....	....	....	....	....	....	42 A 7848	AC-421‡	¾	2.20
3x10x5	42 A 7823	CB-604*	1¼	1.80	42 A 7878	CB-605*	1¼	2.40	42 A 7855	AC-404‡	¾	2.20
3x13x5	....	....	....	....	....	....	....	....	42 A 7906	AC-422‡	¾	2.50
3x14x6	42 A 7824	CB-755†	1¾	2.30	42 A 7900	CB-756†	1¾	2.80	42 A 7139	AC-1414**	1¾	3.30
2x7x7	42 A 7825	CB-789†	1½	1.80	42 A 7879	CB-1191†	1½	2.10	42 A 7849	AC-405‡	½	1.80
2x9x7	42 A 7826	CB-790†	1½	1.80	42 A 7880	CB-1192†	1½	2.10	42 A 7850	AC-406‡	½	1.90
2x11x7	42 A 7827	CB-791†	1½	1.90	42 A 7881	CB-1193†	1½	2.30	42 A 7851	AC-407‡	1	2.20
3x12x7	42 A 7828	CB-792†	1¾	2.10	42 A 7882	CB-793†	1¾	2.80	42 A 7852	AC-408‡	1¼	2.70
2x13x7	42 A 7829	CB-646†	2	2.00	42 A 7883	CB-1194†	2	2.50	42 A 7853	AC-409‡	¾	2.30
2½x13½x5	42 A 7207	CB-647†	2	2.30	42 A 7320	CB-1198†	2	2.90	....	....	....	....
3x15x7	42 A 7208	CB-649†	3	2.70	42 A 7321	CB-1189†	2¾	3.30	42 A 7340	AC-411**	1½	3.70
3x15x8½	42 A 7209	CB-665†	3½	2.90	42 A 7322	CB-666†	3	3.70	42 A 7145	AC-1420**	2¾	3.50
3x17x4	42 A 7210	CB-1068†	2¼	2.40	42 A 7323	CB-1066†	2¼	2.80	42 A 7341	AC-432**	1¼	3.10
2½x17x7	42 A 7211	CB-648†	3	2.70	42 A 7324	CB-1199†	2¾	3.10	42 A 7142	AC-1417**	2½	3.40
3x17x7	42 A 7212	CB-757†	3½	2.90	42 A 7325	CB-758†	3	3.40	42 A 7342	AC-423**	1¾	3.70
2½x10x8	42 A 7213	CB-701†	2	2.30	42 A 7326	CB-702†	2	2.70	42 A 7143	AC-1418**	2¾	2.80
2½x12x8	42 A 7214	CB-703†	2½	2.30	42 A 7327	CB-704†	2½	2.90	42 A 7144	AC-1419**	2½	3.30
3x12x8	42 A 7215	CB-759†	2½	2.40	42 A 7328	CB-760†	2¾	3.10	42 A 7907	AC-424**	1½	3.20
2x17x8	42 A 7217	CB-650†	3	2.30	42 A 7329	CB-774†	3	3.10	42 A 7345	AC-425**	1½	3.30
3x17x8	42 A 7220	CB-651†	3½	2.80	42 A 7330	CB-775†	3½	3.40	42 A 7257	AC-412**	1¾	3.80
3x12x10	42 A 7830	CB-652†	3	2.50	42 A 7901	CB-1195†	3	3.20	42 A 7854	AC-413**	1½	3.80
3x14x10	42 A 7831	CB-653†	4	2.80	42 A 7902	CB-779†	4	3.20	42 A 7908	AC-414**	1¾	3.80
2x17x10	42 A 7221	CB-654†	3¼	2.70	42 A 7284	CB-769†	3	3.20	42 A 7346	AC-415**	1¾	3.70
3x17x10	42 A 7222	CB-636†	3¾	2.70	42 A 7331	CB-1196§	4¾	4.00	42 A 7347	AC-416**	2	4.30
3x23x10	42 A 7225 X	CB-656§	5½	3.90	42 A 7332 X	CB-1197§	5½	4.60	42 A 7148 X	AC-1423††	1¾	6.30
2x17x11	42 A 7227 X	CB-657§	4¾	3.10	42 A 7333 X	CB-770§	4¾	3.80	42 A 7258 X	AC-426††	2¼	4.60
3x17x11	42 A 7228 X	CB-658§	5¼	3.70	42 A 7280 X	CB-771§	5¼	4.70	42 A 7259 X	AC-417††	2½	5.30
2x17x12	42 A 7229 X	CB-663§	4¾	3.40	42 A 7334 X	CB-661§	5	4.10	42 A 7150 X	AC-1425**	1½	4.80
3x17x12	42 A 7230 X	CB-664§	5½	3.80	42 A 7281 X	CB-662§	5½	4.80	42 A 7263 X	AC-418††	2¾	5.40
2x17x13	42 A 7231 X	CB-659§	5¼	3.80	42 A 7282 X	CB-772§	5¼	4.90	42 A 7348 X	AC-419††	2½	4.80
3x17x13	42 A 7232 X	CB-660§	6¼	4.50	42 A 7283 X	CB-773§	6½	5.40	42 A 7260 X	AC-420††	2¾	5.70
4x17x10	42 A 7233	CB-640§	5¾	4.30	42 A 7335	CB-641§	6½	4.80	42 A 7261	AC-427††	2¾	6.00
4x17x13	42 A 7234 X	CB-642§	7½	5.30	42 A 7336 X	CB-643§	7¾	6.30	42 A 7262 X	AC-428††	3¼	7.00
5x17x10	42 A 7235	CB-623§	7	6.00	42 A 7337	CB-624§	6¾	7.10	42 A 7147 X	AC-1422**	¾	8.70
5x17x13	42 A 7236 X	CB-625§	7¾	6.60	42 A 7338 X	CB-626§	7½	7.80	42 A 7151 X	AC-1426††	2¼	9.50

BOTTOM PLATES FOR CHASSIS BASES

Bottom plates to fit the chassis bases listed above. Ideal for shielding and for protecting components and wiring from dust and damage. In black-wrinkle finish or zinc-plated heavy-gauge steel and natural-finish aluminum (Alloy 5005 H-14). Have four embossed feet in corners to prevent marring and scratching table-tops, shelves, or other surfaces. Drilled for use with No. 6 self-tapping screws.

Size WxL	Wt., Lbs.	Black Wrinkle			Zinc Plated			Natural-Finish Aluminum			
		Stock No.	Type No.	EACH	Stock No.	Type No.	EACH	Stock No.	Type No.	Lbs.	EACH
5x7″	½	42 A 7654	BP-705	.80	42 A 7674	BP-706	.80	42 A 7694	BPA-1589	⅛	.90
5x9½″	¾	42 A 7655	BP-680	.80	42 A 7675	BP-667	.90	42 A 7695	BPA-1590	¼	.90
5x10″	¾	42 A 7656	BP-536	.90	42 A 7676	BP-538	1.00	42 A 7696	BPA-1591	¼	.90
7x7″	1	42 A 7657	BP-681	1.30	42 A 7677	BP-668	1.30	42 A 7697	BPA-1592	⅛	.90
7x9″	1	42 A 7658	BP-682	1.30	42 A 7678	BP-669	1.30	42 A 7698	BPA-1593	⅛	1.00
7x11″	1	42 A 7659	BP-683	1.30	42 A 7679	BP-670	1.30	42 A 7699	BPA-1594	⅛	1.10
7x12″	1¼	42 A 7660	BP-537	1.40	42 A 7680	BP-539	1.60	42 A 7700	BPA-1595	½	1.30
7x13″	1¼	42 A 7661	BP-684	1.30	42 A 7681	BP-671	1.50	42 A 7701	BPA-1596	½	1.40
5x13½″	1	42 A 7662	BP-685	1.00	42 A 7682	BP-672	1.30	42 A 7167	BPA-1510	½	1.40
4x17″	1½	42 A 7663	BP-1069	1.10	42 A 7683	BP-1067	1.50	42 A 7163	BPA-1532	¾	1.00
7x17″	1½	42 A 7664	BP-686	1.10	42 A 7684	BP-673	1.70	42 A 7174	BPA-1517	¾	1.60
8x10″	1¼	42 A 7668	BP-707	1.10	42 A 7685	BP-708	1.30	42 A 7175	BPA-1518	¾	1.50
8x12″	1½	42 A 7665	BP-709	1.30	42 A 7686	BP-710	1.60	42 A 7176	BPA-1519	½	1.80
8x17″	1¾	42 A 7666	BP-687	1.30	42 A 7687	BP-674	1.80	42 A 7177	BPA-1520	½	1.90
10x12″	1½	42 A 7667	BP-688	1.30	42 A 7688	BP-675	1.90	42 A 7180	BPA-1523	¾	1.80
10x14″	1½	42 A 7669	BP-517	1.80	42 A 7689	BP-514	1.80	42 A 7181 X	BPA-1524	¾	1.80
10x17″	1¾	42 A 7670	BP-689	1.50	42 A 7690	BP-676	1.90	42 A 7702	BPA-1597	¾	1.80
11x17″	1½	42 A 7671 X	BP-690	1.50	42 A 7691 X	BP-677	1.90	42 A 7183	BPA-1526	¾	2.00
12x17″	2	42 A 7672 X	BP-691	1.80	42 A 7692 X	BP-678	2.30	42 A 7185	BPA-1528	¾	2.40
13x17″	2¼	42 A 7673 X	BP-692	1.80	42 A 7693 X	BP-679	2.70	42 A 7703	BPA-1598	¾	2.60

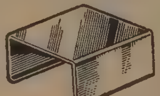
OPEN-END ALUMINUM CHASSIS



Heavy-gauge. U-shaped construction with ends folded over ⅜″. For any cabinet, but ideally match Bud units listed in table, below. Av. shpg. wt., 1 lb.

Stock No.	Type	HxWxD	For	EACH
42 A 7801	CB-30	1½x7x5″	....	1.30
42 A 7802	CB-41	1½x7x7″	C-973	1.60
42 A 7804	CB-996	1½x9x5½″	C-993	1.50
42 A 7805	CB-976	1½x9x7½″	C-999, CD-1481	1.80
42 A 7807	CB-997	1½x11x7″	C-994, CD-1482	1.80
42 A 7808	CB-998	1½x13x7″	C-995, CD-1483	2.10
42 A 7800	CB-38	2x6x7″	C-1584	1.30
42 A 7803	CB-39	2x8x7″	C-1585	1.50
42 A 7806	CB-40	2x10x7″	C-1586	1.80

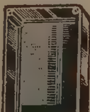
MINIATURE ALUMINUM CHASSIS



Open-end aluminum chassis for limited space applications. For any cabinet, but ideally match Bud units listed in table below. One-piece construction. ¼″ mounting flanges. Av. shpg. wt., ¾ lb.

Stock No.	Type	HxWxD	For	EA.
42 A 7810	CB-1624	1x3⅛x1¾″	CU-883	.60
42 A 7816	CB-1617	1x3⅛x4″	C-1606	.60
42 A 7812	CB-1626	1x4⅛x2¾″	CU-728	.70
42 A 7817	CB-1618	1x4⅛x4″	C-1607	.70
42 A 7818	CB-1619	1x5⅛x4″	C-1608	.80
42 A 7819	CB-1620	1x6⅛x4″	C-1609	.80
42 A 7809	CB-1623	1¼x2¾x2⅝″	....	.50
42 A 7814	CB-1628	1¼x6⅛x3″	C-1788	.80
42 A 7813	CB-1627	1½x4⅛x3¾″	CU-729	.70
42 A 7815	CB-1629	1½x4⅞x5¾″	CU-1098	.80
42 A 7811	CB-1625	2x4½x3¼″	C-1788	.70

HARRY DAVIES PLASTIC CASES AND PANELS



Molded black plastic cases and panels designed for test instrument mounting. Sturdily constructed to protect components. Recessed bosses for flush mounting of covers. Drilled for ½″ No. 6 self-tapping screws except *tapped for 4-36x½″ screws. Walls and covers are ⅛″ thick.

CASES

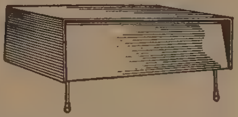
Stock No.	Size HxWxD	Wt., Lbs.	EACH
42 A 7895	*2⅞x4x1 9/16″	1	.39
42 A 7885	6¼x3¾x2″	1½	.66
42 A 7886	6 13/16x5 9/32x2 6/16″	2	.89

MATCHING COVERS

Stock No.	Size HxWxD	Wt., Lbs.	EACH
42 A 7887	6x3½″	½	.45
42 A 7888	6½x5″	1	.61
42 A 7896	4x2⅞″	½	.30

Bud Metal Cabinets and Cases

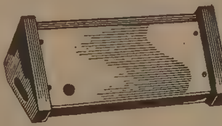
TILT-A-VIEW CABINETS



lanted front face and vertical ar face of cabinet provide a umber of viewpoints to allow ccurate, no-glare reading of quipment. Detachable legs. 18-a. steel construction. Scratch-resistant gray and brown finish.

Stock No.	Mfr's Type	HxWxD	Wt., Lbs.	EACH
42 A 7377 X	TV-2155	4½x15x10″	7	8.10
42 A 7378 X	TV-2156	6½x16x12″	12½	9.50
42 A 7379 X	TV-2157	8½x17x14″	17	13.80

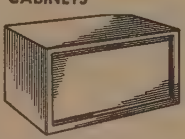
MARK-T CABINETS



ntire contents are visible and ccessible through opening door. oor and front panel can be removed. Self-adjusting latch. 16-a. all-welded steel construction. ubber feet, recessed carrying andles. Charcoal-gray finish, ght gray panel and door.

Stock No.	Mfr's Type	Width	Panel Size	Wt., Lbs.	EACH
2 A 7384 X	MT-214	16″	5¾x14″	9	30.40
2 A 7385 X	MT-219	21″	5¾x19″	12	33.30
2 A 7386 X	MT-224	26″	5¾x24″	14½	39.20

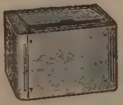
MULTI-PURPOSE FUTURA CABINETS



abinet has removable top and side. The ont panel is flange held, no screws are quired. Body and rear panel are of 20-uge steel; front panel, both vertical and ° incline, are of 18-gauge steel. Each has ur rubber feet mounted on base. Chassis ay be mounted to the base, front or to e rear panel. Cabinets come with a **nooth blue or gray finish. Specify nish desired.**

Stock No.	Type MD-	Size, HxWxD	Panel Style	Wt., Lbs.	EACH
2 A 8732 CX	1960	7x13x8″	Vertical	6¾	9.00
2 A 8737 CX	1965	8x16x9″	Inclined	8¾	12.00

STREAMLINED CABINETS

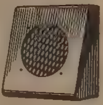


eal for small electrical and electronic devices. Rugdly built. Recessed hinged-cover has convenient ger-lift for easy opening. Complete access to comnents. Front panel fits flush with embossed, round-front corners. Panel is removable for chassis inallation or cutouts. 3½″ high opening in rear for bles or controls. Louvered sides provide ample venation. Steel, 20-gauge body and 18-gauge panel. 8″ high x 8¼″ deep, cept *12″ high x 12″ deep.

SPECIFY BLACK WRINKLE OR GRAY HAMMERTONE FINISH

Stock No.	Mfr's Type	Width	Panel Space	Wt., Lbs.	EACH
A 7592 C	CD-1480	10½″	8x8″	6¼	7.60
A 7593 C	CD-1481	12½″	8x10″	6	7.70
A 7594 CX	CD-1482	14½″	8x12″	7½	8.20
A 7595 CX	CD-1483	16½″	8x14″	8¾	8.80
A 7596 CX	CD-1484	18½″	8x16″	9½	9.40
A 7597 CX	CD-1485*	20⅝″	12x18″	16¾	19.20

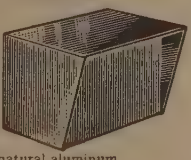
WALL-TYPE SPEAKER CASES



ugged, versatile steel speaker cases for use on wall or ble. Will not warp or split. Designed and built to be affected by weather and temperature conditions. eyway holes are provided for wall-mounting and four nbossed feet for table-mounting. Brown wrinkle amel finish.

Stock No.	Mfr's Type	Hole Size	Spkr. Size	Size HxWxD	Wt., Lbs.	EACH
A 8771	CS-1948	3½″	4″	7½x6½x4¼″	1¾	3.60
A 8772	CS-1939	4″	5″	7½x6½x4¼″	1¾	3.80
A 8773	CS-1940	4¾″	6″	9½x8x5⅝″	3	4.30
A 8774	CS-1941	6½″	8″	11½x9½x7″	4	5.50

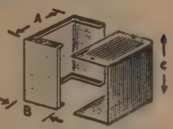
ALUMINUM COWL-TYPE MINIBOXES



ud's cowl-type miniboxes. Attractively yled; easily drilled or punched. Have ojecting cover which reduces glare on e panel from overhead lighting. Also provide protection for knobs, switches, and eter faces. May be used for housing reivers, transmitters, test equipment, etc. over has two ½″ box braces to which botm is attached with #6 sheet metal rews provided. This construction results a sturdy, rigid housing. All are made of ng-lasting, 18-gauge aluminum. Choice handsome, gray hammertone finish or natural aluminum.

Size xWxD	Shpg. Wt., Lbs.	Gray Hammertone	Type SC-	EACH	Natural Aluminum	Type SC-	EACH
10x7″	2	42 A 8684	2130	7.30	42 A 8688	3030	5.30
12x8″	2¾	42 A 8685	2131	8.00	42 A 8689	3031	5.80
8x6″	1	42 A 8686	2132	4.30	42 A 8690	3032	3.00
5x5″	1	42 A 8687	2133	4.30	42 A 8691	3033	3.20

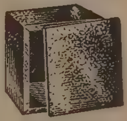
ALUMINUM MINIBOXES



Two-piece aluminum boxes with gray hammertone or natural aluminum finish. Particularly suited for sub-assemblies. May be used for amplifiers, converters, TVI filters, test units, etc. Two-piece construction permits easy access to circuitry. Flanges assure low RF leakage and high rigidity. Dual-purpose snap locks permit quick assembly and disassembly; also permit use with self-tapping screws (supplied).

Size AxCxB	Shpg. Wt., Lbs.	Gray Hammer-tone	Type CU-	EA.	Natural Alumi-num	Type CU-	EACH
2¾x2⅛x1⅝″	¼	42 A 7616	2100A	.90	42 A 7634	3000A	.80
3¼x2⅛x1⅛″	¼	42 A 7633	2117A	1.10	42 A 7651	3017A	.80
3¼x2⅛x1⅝″	¼	42 A 7617	2101A	.90	42 A 7635	3001A	.80
4x2x2¾″	¼	42 A 7631	2115A	1.10	42 A 7649	3015A	1.00
4x2⅛x1⅝″	¼	42 A 7618	2102A	1.00	42 A 7636	3002A	.80
4x2¼x2¼″	¼	42 A 7619	2103A	1.10	42 A 7637	3003A	1.10
4¼x2¼x1½″	¼	42 A 7632	2116A	1.10	42 A 7650	3016A	1.00
5x2¼x2¼″	¼	42 A 7620	2104A	1.20	42 A 7638	3004A	1.10
5x4x3″	½	42 A 7621	2105A	1.50	42 A 7639	3005A	1.10
5¼x3x2⅛″	¼	42 A 7622	2106A	1.30	42 A 7640	3006A	1.10
6x5x4″	¾	42 A 7623	2107A	1.90	42 A 7641	3007A	1.40
7x5x3″	¾	42 A 7624	2108A	2.20	42 A 7642	3008A	1.80
8x6x3½″	1	42 A 7625	2109A	2.80	42 A 7643	3009A	2.30
10x2x1⅝″	½	42 A 7629	2113A	1.60	42 A 7647	3013A	1.30
10x6x3½″	1¼	42 A 7626	2110A	3.10	42 A 7644	3010A	2.50
12x2½x2¼″	¾	42 A 7630	2114A	2.10	42 A 7648	3014A	1.80
12x7x4″	1¾	42 A 7627	2111A	4.20	42 A 7645	3011A	3.50
17x5x4″	2¼	42 A 7628	2112A	4.20	42 A 7646	3012A	3.50

UTILITY CABINETS

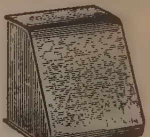


Metal utility cabinets for all types of electronic equipment. Excellent for housing receivers, monitors, VFO's, test equipment, frequency meters, transmitters, etc. Well adapted for shielding of high gain preamplifiers, RF sections, other special circuits. Two removable panels attach to flanges with self-tapping screws. *Gray aluminum.

Size, HxWxD	Mfr's Type	Wt., Lbs.	Stock No. Black Steel	Stock No. Gray Steel	EACH
4x4x2″	CU883	¾	42 A 7856	42 A 7606	1.40
4x5x3″	CU728	⅞	42 A 7857	42 A 7607	1.60
6x5x4″	CU729	1¼	42 A 7858	42 A 7608	1.80
6x6x6″	CU1098	2½	42 A 7859	42 A 7609	2.80
9x6x5″	CU1099	3	42 A 7860	42 A 7610	3.00
10x8x7″	CU879	5	42 A 7861	42 A 7611	4.30
10x10x8″	CU880	5½	42 A 7863	42 A 7613	5.20
12x7x6″	CU1124	4	42 A 7862	42 A 7612	4.20
12x11x8″	CU881	6	42 A 7864	42 A 7614	5.70
15x9x7″	CU882	7½	42 A 7865	42 A 7615	5.80

Size, HxWxD	Mfr's Type	Wt., Lbs.	Natural Aluminum	EACH	*Hammertone Aluminum	EACH
4x4x2″	AU-1083	¼	42 A 8543	1.80	42 A 8548	2.00
4x5x3″	AU-1028	¼	42 A 8544	1.80	42 A 8549	2.30
6x5x4″	AU-1029	½	42 A 8545	2.00	42 A 8550	2.40
6x6x6″	AU-1039	¾	42 A 8546	2.90	42 A 8551	3.20
9x6x5″	AU-1040	1	42 A 8547	3.30	42 A 8552	4.00

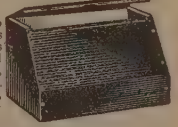
UNIVERSAL SLOPING-PANEL CABINETS



Versatile, streamlined sloping-panel cabinets available in steel or aluminum. Offer enough space to house a two or three-miniature-tube amplifier or gadget. Sides and one-piece detachable back fasten to the body with self-tapping screws for easy service and replacement of components. Fully enclosed to exclude dust and moisture. Easily accommodate most small chassis. All units are 4″ high, 4¼″ deep. Finished in attractive gray hammertone.

Width	Steel Stock No.	Type C-	Shpg. Wt., Lbs.	EA.	Aluminum Stock No.	Type AC-	Shpg. Wt., Lbs.	EA.
4″	42 A 8642	1606	¾	1.90	42 A 8646	1610	½	2.40
5″	42 A 8643	1607	¾	2.00	42 A 8647	1611	½	2.30
6″	42 A 8644	1608	1⅛	2.20	42 A 8648	1612	¾	2.50
7″	42 A 8645	1609	1⅛	2.50	42 A 8649	1613	¾	2.80

SLOPING-PANEL CABINETS



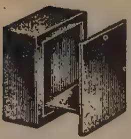
Sloping-panel steel cabinets with hinged top for easy access to tubes and top-of-chassis components. Removable front panel permits easy attachment of chassis. Fit following sized chassis: Type C-1584, 7x6x2″; Type C-1585, 7x8x2″; Type 1586, 7x10x2″; Type C-1587, 7x7x2″; Type C-1588, 7x9x2″; Type C-1892, 8x12x2½″; Type C-1893, 10x17x3″; Type C-1894, 7x13x2″; Type C-1896, 7x17x3″.

SPECIFY BLACK WRINKLE OR LIGHT GRAY HAMMERTONE

Stock No.	Mfr's Type	Size HxWxD	Wt., Lbs.	EACH
42 A 7466 C	C-1584	6½x7 1/16x7 7/32″	2½	4.30
42 A 7467 C	C-1585	6½x9 1/16x7 7/32″	3	4.70
42 A 7468 C	C-1586	6½x11 1/16x7 7/32″	3½	5.40
42 A 7469 C	C-1892	8x13 1/16x8 13/32″	5¼	7.40
42 A 7470 CX	C-1893	10x18 1/16x10 13/32″	12¾	9.80
42 A 7471 C	C-1587	8x8 1/16x7 15/16″	2¾	5.70
42 A 7472 C	C-1588	8x10 1/16x7 15/16″	3¼	6.30
42 A 7474 C	C-1894	8x14 1/16x7 15/16″	6¼	6.70
42 A 7475 CX	C-1896	9x18 1/16x8 1/16″	6¼	9.40

Bud Metal Cabinets, Panels, Racks, Handles

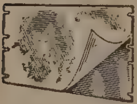
MINIATURE UTILITY CABINETS WITH ATTACHED CHASSIS



Sturdily-made, unusually compact, steel utility cabinets with a built-in chassis attached to the front panel. Especially suitable for standing-wave bridges, frequency meters, small transistorized receivers, code practice oscillators, decade boxes, crystal sets, and many other types of small, self-contained units. Removable front and rear panels fastened with self-tapping screws permit easy access to components. 22-ga. body; 20-ga. panel; 18-ga. chassis. Black-wrinkle enamel finish.

Stock No.	Mfr's Type	Cabinet HxWxD	Chassis HxWxD	Wt., Lbs.	EACH
42 A 7601	C-1794	4x5x3"	1x4⅛x2⅞"	1	1.90
42 A 7602	C-1795	5x4x3"	1¼x3⅛x2⅞"	1	2.10
42 A 7603	C-1796	6x5x4"	1¾x4⅛x3⅞"	1¾	2.20
42 A 7604	C-1797	5x6x4"	1¼x5⅛x3⅞"	1¾	2.50
42 A 7605	C-1798	6x6x6"	1¾x4⅞x5⅞"	2¾	3.00

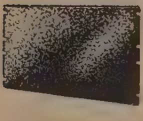
SHIELDED-SURFACE RACK PANELS



Naturally bright aluminum-alloy, covered on both sides with protective, pressure-sensitive white paper. Blemish-free mill finish. ⅛" thick. 19" wide. Standard notching.

Stock No.	Mfr's Type	Ht.	Wt., Lbs.	EACH
42 A 8662 X	SFA-1831	1¾"	½	1.30
42 A 8663 X	SFA-1832	3½"	1	2.00
42 A 8664 X	SFA-1833	5¼"	1¼	2.60
42 A 8665 X	SFA-1834	7"	1¾	3.20
42 A 8666 X	SFA-1835	8¾"	2	3.80
42 A 8667 X	SFA-1836	10½"	2½	4.80
42 A 8668 X	SFA-1837	12¼"	3	5.50
42 A 8669 X	SFA-1838	14"	3½	6.30

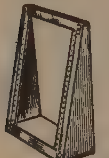
STANDARD RACK PANELS



Heavy-duty rack panel constructed of ⅛" aluminum. All are 19" in width and have notched edges to fit spacing of standard telephone type relay racks. **Specify black or gray wrinkle, smooth gray or gray hammertone.**

Stock No.	Height	Wt., Lbs.	EACH
42 A 7408 CX	1¾"	½	1.40
42 A 7409 CX	3½"	1	2.00
42 A 7410 CX	5¼"	1¼	2.60
42 A 7411 CX	7"	1¾	3.30
42 A 7417 CX	8¾"	2	3.80
42 A 7418 CX	10½"	2½	4.80
42 A 7419 CX	12¼"	3	5.70

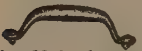
DESK-TYPE RACKS



A strong, steel chassis ideal for mounting heavy components. Perfect for table mounting of low and medium power transmitters, P.A. systems, and other electronic equipment. Designed for use with standard 19" panels. No exposed edges. With hardware. Gray hammertone finish.

Stock No.	Mfr's Type	Panel Ht.	Overall Size	Wt., Lbs.	EACH
42 A 7309 U	RR-1248	21"	24x20⅛x12"	14½	12.20
42 A 7311 U	RR-1249	28"	31x20⅛x12"	17¼	14.40

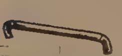
ALUMINUM UTILITY HANDLES



Strong handles with comfortable grip. Ideal for mounting on cabinets to afford portability. Made of tubular aluminum with etched finish. Shpg. wt., 2 oz. **In pairs only.**

Stock No.	Type	Lgth.	Mtg. Ctr.	PAIR
42 A 7893	UH-70A	5⅛"	4⅝"	.60
42 A 7894	UH-71A	3¾"	3¼"	.50

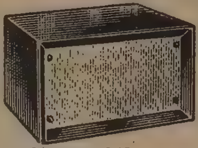
STEEL UTILITY HANDLES



Ruggedly constructed from ¾" steel rod. Chrome-plated. 15⁄16" hand clearance. With all necessary mounting hardware. Av. wt., 3 oz.

42 A 8055	H-9111	4½"	4"	2.40
42 A 8057	H-9113	8½"	8"	3.10

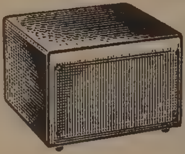
SHADOW CABINETS



Versatile housing for amplifiers, test equipment, etc. Both front panels as well as the bottom may be removed for installation and servicing purposes. Front panel is recessed 1" to protect controls, meters, etc. Recessed panel and bevelled front edges of cabinet provide attractive appearance. Body constructed of 18-gauge steel, panels of 16-gauge steel. Rubber feet attached to bottom of cabinet prevent marring of the surface on which it may be placed. Finished in attractive, light gray hammertone.

Stock No.	Type SB-	Size HxWxD	Use Bud Chassis	Wt., Lbs.	EACH
42 A 7253	2140	8x14½x10"	AC-424	11¼	8.90
42 A 7254	2141	7½x13¼x9"	AC-407	9½	7.10
42 A 7255 X	2142	9½x17x11"	CB-666	16	11.90
42 A 7256	2143	6x15½x9"	AC-409	9¾	6.80

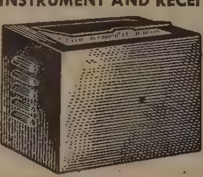
UTILITY CABINETS



Attractive housing with rounded corners. All constructed of 20-gauge steel. Front and rear panels removable; rear panel louvered for ventilation. 4 rubber feet. Body finished in dark gray enamel, panels in light gray enamel.

Stock No.	Mfr's Type	Size HxWxD	Wt., Lbs.	EACH
42 A 8692	CU-463	4⁷⁄₃₂x6⁷⁄₃₂x3¾"	1¾	6.20
42 A 8693	CU-465	4⁷⁄₃₂x6⁷⁄₃₂x5¾"	2¼	7.10
42 A 8694	CU-585	5⁷⁄₃₂x8⁷⁄₃₂x5¾"	3	9.10
42 A 8695	CU-587	5⁷⁄₃₂x8⁷⁄₃₂x7¾"	3¾	10.00
42 A 8696	CU-7125	7⁷⁄₃₂x12⁷⁄₃₂x5¾"	5	9.20
42 A 8697	CU-7127	7⁷⁄₃₂x12⁷⁄₃₂x7¾"	6	9.70

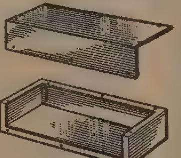
INSTRUMENT AND RECEIVER CABINETS



Ruggedly constructed steel cabinets. Have recessed hinged cover for easy access. Front panel is held securely in place with self-tapping screws. Panel extends full width of cabinet—provides maximum space. Louvers for ventilation. 20-ga. body; 18-ga. panel, except *16-ga. Black wrinkle finish.

Stock No.	Type	HxWxD	Lbs.	EA.
42 A 7652	C-973	7x8x8"	8	5.70
42 A 7653	C-993	7x10x8"	8	6.50
42 A 7200	C-994	7x12x8"	6	6.70
42 A 7201	C-995	7x14x8"	7¼	7.20
42 A 7202 X	*C-1190	8x16x8"	9¼	10.20
42 A 7203 X	*C-975	9x15x11"	13	12.40
42 A 7205 X	*C-999	12x18x12"	17½	13.40

"CONVERTA" BOXES

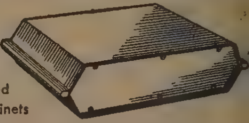


Components or Controls Can Be Mounted to Any Surface of Enclosure

Versatile enclosures to hold a variety of equipment. Consist of welded base and two-sided cover designed to afford maximum protection. Components and controls mount on any surface. Cover and base fasten with self-tapping screws. Easy access to equipment. 20-gauge steel, cadmium plated. With hardware.

Stock No.	Mfr's Type	Size HxWxD	Wt., Lbs.	EA.
42 A 7704	CU-341	1½x4x3"	½	2.40
42 A 7705	CU-452	2x5x4"	1	2.30
42 A 7706	CU-482	2x8x4"	1¼	2.50
42 A 7707	CU-592	2½x9½x5"	1¾	2.70
42 A 7708	CU-622	2½x12x6"	2¾	2.90
42 A 7709	CU-712	2½x15x7"	3½	3.90

STYLISH GRAND PRIX CABINETS

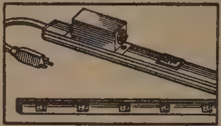


Versatile,
Streamlined
Steel Cabinets

Upper and lower 20-gauge steel segments held by brushed aluminum extensions (also serve as handles) with set screws. 2 panels furnished. 4 rubber feet in base. **Specify light gray hammertone, or smooth dark gray finish.**

Stock No.	Mfr's Type	Size, HxWxD	Wt., Lbs.	EACH
42 A 8723 CX	MD-1	4³⁄₁₆x19⅛x10½"	7¼	16.70
42 A 8724 CX	MD-2	7³⁄₁₆x19⅛x10½"	7¾	17.50
42 A 8725 CX	MD-3	4⁵⁄₁₆x12⅛x8¾"	7	13.50

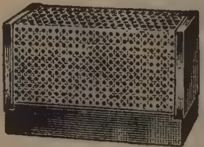
AC POWER OUTLET STRIPS



Convenient outlets mount easily in equipment cabinets and racks by snapping into clips. Supplied with 15-A, 125-V grounding receptacles, 15-A overload circuit breaker with reset button. 6-ft. cord, grounding plug. Heavy-duty light-gray enameled steel. U.L. Listed.

Stock No.	Mfr's Type	Lgth.	Outlets	Wt., Lbs.	EACH
42 A 7380 X	POS-4	17½"	4	2	22.70
42 A 7381 X	POS-7	48"	7	4	23.90
42 A 7382 X	POS-9	60"	9	4¼	26.30
42 A 7383 X	POS-11	72"	11	5	28.70

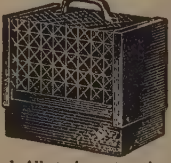
STANDARD AMPLIFIER FOUNDATIONS



Ideal for most amplifier requirements. Foundations consist of regular steel chassis with metal covers. Solid pieces are used on ends of each cover for bracing and a snug fit to chassis. Heavy-gauge metal screening assures proper protection and ventilation of components. Metal handles provide portability. Types CA-699, CA-1125, and CA-1126 have 2½" high chassis; Type CA-1128 has 3" high chassis. Cover, ends, and chassis are 20-ga. steel. Black wrinkle finish.

Stock No.	Type	HxWxD	Lbs.	EACH
42 A 7244	CA-699	8⁵⁄₁₆x9⅝x5⅛"	4	7.60
42 A 7245	CA-1125	8⁵⁄₁₆x13⅝x5⅛"	4¾	7.90
42 A 7246	CA-1126	8⁵⁄₁₆x17⅛x7⅛"	6½	8.90
42 A 7242	CA-1128	8¹³⁄₁₆x12⅛x10⅛"	6¾	9.20

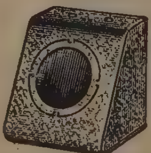
MINIATURE AMPLIFIER FOUNDATION



Type CA-1754. Meets the requirements of builders employing miniaturized components. Chassis is only 2" high, 7" wide, and 5" deep. With cover fastened in place, entire unit stands only 6" high! Portable—easy to carry. Removable cover includes a carrying handle. Cover is heavily perforated. All-steel construction—20-ga. cover; 22-ga. chassis. Black wrinkle finish. 1½ lbs.

42 A 7866 .... 5.40

UNIVERSAL METER CASES



For use with 2" or 3" meters. With front panel for 2" meter. Knockout ring enlarges hole for a 3" meter. Have one-piece back and side attached with 4 screws. Top has two ⅜" knockouts for terminal posts or feed-throughs. Steel or aluminum; gray hammertone. 4½x4x4".

Stock No.	Type	Material	Lbs.	EA.
42 A 8541	CM 1935	Steel	1	1.70
42 A 8542	CMA 1936	Aluminum	¾	1.90

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Easy to Install Your Own TV Antenna—all antennas in this alog are designed for easy installation. Use regular house- d tools. You can usually use your present antenna mast. But ck your present lead-in-wire—worn lead-in spoils pictures.

PRECISION ROTATOR

Color TV Comes Alive with a Good Antenna Rotator—only a well-aimed antenna gets the lifelike color pictures you expect. If your picture varies in quality from station-to-station, or you live in a fringe area, a rotator may be a "must."

Rotators Improve Stereo-FM Reception—if you live in a difficult or fringe area, a rotator can tune out unwanted multipath (ghost) signals for superior channel separation, freedom from interference, and reduced distortion. Improves monophonic FM, too.

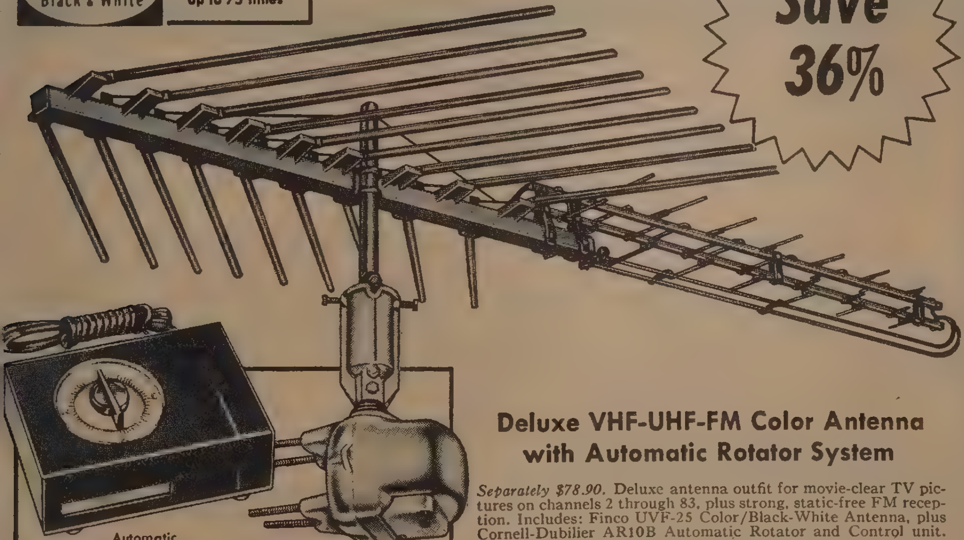
Receive Stations from More than One City—many communities receive signals from more than one locale. A rotator makes it easy to zero-in on each station, no matter where it's located.

Extra Savings on This 82-Channel Finco Antenna with CDE Automatic Rotator

DESIGNED for COLOR and Black & White

VHF-FM up to 125 miles . . UHF up to 75 miles

Save 36%



COMPLETE OUTFIT

49.95 $5 monthly (SEE PAGE 438) **Save $28.95**

- Movie-clear TV pictures and static-free FM
- Zeros-in on stations from more than one city
- Gold-Corodized to fight rust and corrosion

Deluxe VHF-UHF-FM Color Antenna with Automatic Rotator System

Separately $78.90. Deluxe antenna outfit for movie-clear TV pictures on channels 2 through 83, plus strong, static-free FM reception. Includes: Finco UVF-25 Color/Black-White Antenna, plus Cornell-Dubilier AR10B Automatic Rotator and Control unit.

Antenna has 24 triple-thick, sleeved, driven elements; tough 143⅜" square boom; continuous one-piece drive line. Exclusive air-insulated crossover spacer. Lock-tite, no-tilt saddle bracket; double contact to drive line; revolutionary step-staggering UHF section; rust-fighting weatherproof "Gold Corodized" finish. Requires only one down-lead. UHF-VHF splitter included.

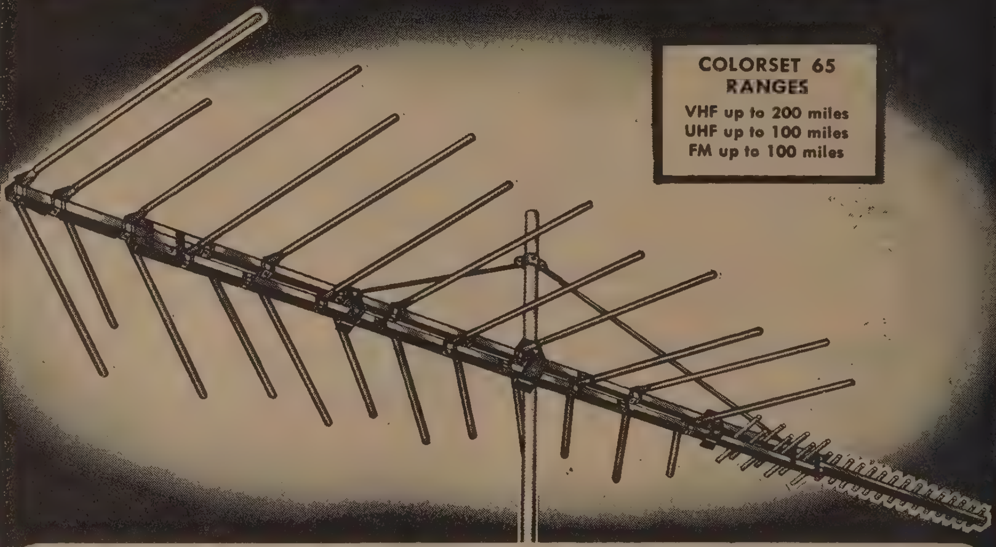
Automatic rotator assures best possible reception from each station, especially in fringe areas. Just set pointer on control unit's compass dial to desired direction and antenna turns automatically. Turning radius up to 6½ feet. Rotator adapter gives added support to mast. Thrust bearing permits mounting of antenna 5 feet above rotator for easier movement. Mounts on chimney, etc. Less mast. Sent express.

11 A 0468 L2Z W. Shpg. wt., 27 lbs.......................49.95

leage Ranges in This Catalog are Based on Reception Over Flat Terrain

DESIGNED for COLOR and Black & White

Allied Super Power "Colorset" UHF-VHF-FM Antennas . . our best!



COLORSET 65 RANGES

VHF up to 200 miles
UHF up to 100 miles
FM up to 100 miles

- ✓ Double dual-action reflectors
- ✓ Massive arrowhead insulators
- ✓ Wrap-around brackets—300% stronger
- ✓ Triple-thick rugged sleeved elements
- ✓ Frequency-Dependent concept

Low as

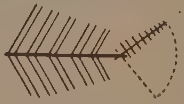
34.95

EXTRA-HEAVY-DUTY CONSTRUCTION

- Bridge-type boom suspension
- Gold-corodized to fight corrosion
- Super-power—68 active elements
- Heavy-duty twin boom construction

"COLORSET 65" 3-IN-1 DEEP-FRINGE UHF-VHF-FM ANTENNA

SIGNAL-SEEKER FOR FINEST UHF



Signal-Seeker UHF elements can be aimed separately for best UHF pictures without sacrificing VHF quality

49.95
$5 monthly*

The "Colorset 65" is the best, most powerful antenna we have ever offered. Revolutionary "Frequency-Dependent" design delivers sharpest UHF and VHF pictures. It's the best value in an all-purpose antenna—compare other brands. The 34 elements on twin boom construction operate as 68 half-wave elements for clearest color, black-and-white, and will pull in FM stations up to 100 miles away. 11 half-wave elements operate on low band channels 2-6 and FM, 35 half-wave elements on high-band channels 7-13; 22 half-wave elements on UHF channels 14-83.

High gain (signal pulling power) and flat frequency response assure clearest pictures. Greatly improved directivity results from the very narrow pattern achieved. This, combined with the new dual reflector system, giving the highest front-to-back ratio, fights ghosts and assures distortion free color, even in suburban and deep-fringe areas. Massive arrowhead insulators with wrap-around brackets provide 300% greater strength than ordinary construction.

Gold-corodized to fight corrosion and maintain its handsome appearance. Triple-thick, sleeved elements. Bridge-type boom construction prevents sagging. Exclusive boom support and sideway control. Includes UHF-VHF splitter—only one down-lead is required. Special filter network isolates signals. 300 ohms. Foam-type lead-in recommended. Less mast.
11 **A 2013 ZW.** Shpg. wt., 16¼ lbs. 49.95

"COLORSET 60A"—VHF UP TO 190 MILES, UHF TO 90 MILES, FM TO 100 MILES

39.95
$5 monthly*

Similar to the advanced design of the "Colorset 65" but for use in mid-to-far fringe areas. Vivid true-to-life color, plus sharp black-and-white TV and clear FM. Twin-boom construction with 30 physical elements operating as 9 half-wave elements on Ch. 2-6, 28 half-wave elements on Ch. 7-13, and 20 half-wave elements operating on the UHF channels. Boom length is 178". You get sharp pictures all channels—VHF and UHF, plus distortion-free FM and FM stereo reception. Gold corodized. Includes UHF-VHF signal splitter. 300 ohms. Foam type lead-in recommended. Less mast.
11 **A 2014 ZW.** Shpg. wt., 14 lbs. 39.95

"COLORSET 55A"—VHF UP TO 180 MILES, UHF TO 80 MILES, FM TO 90 MILES

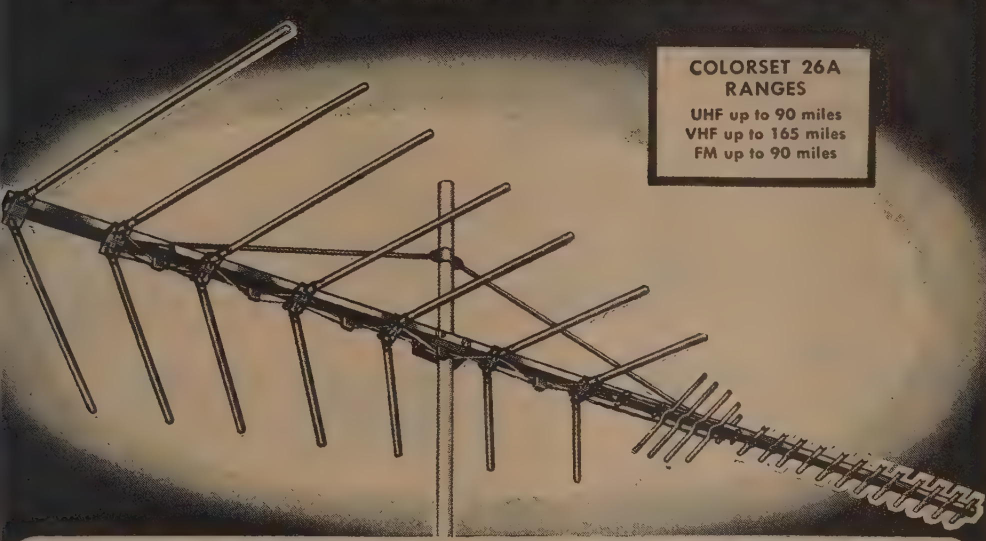
34.95
$5 monthly*

"Frequency Dependent" design for true-to-life color, sharp black-and-white and clear FM. Twin boom construction with 28 physical elements operating as 7 half-wave elements on the Ch. 2-6, 22 half-wave elements on Ch. 7-13 and 20 half-wave elements on UHF. You are assured of sharp pictures on all VHF and UHF channels, plus FM or FM stereo reception. Boom length is 159". Gold corodized to fight rust. Includes UHF-VHF signal splitter. 300 ohms. Less mast.
11 **A 2015 ZW.** Shpg. wt., 11½ lbs. 34.95

SHIPPING NOTE: Items with suffix U, W or Z in stock no. sent truck or express. See Ordering Information pages.

Allied Extra-Value "Colorset" UHF-VHF-FM Antennas . . Priced Low

DESIGNED for COLOR and Black & White



COLORSET 26A
RANGES
UHF up to 90 miles
VHF up to 165 miles
FM up to 90 miles

- ✓ Patented Frequency Dependent design
- ✓ Excellent for FM and FM stereo
- ✓ Sharp, clear true color reception
- ✓ 3-in-1 antenna serves all needs
- ✓ Heavy-duty one-inch square boom
- ✓ Powerful multiple-drive elements

Low as

14.95

HEAVY-DUTY CONSTRUCTION

- Protective gold corodized finish
- One-piece UHF and VHF drive lines
- Offers years of trouble-free service
- High-impact crossover spacers

"COLORSET 26A" POWERFUL DEEP-FRINGE UHF-VHF-FM ANTENNA

29.95
$5 monthly*

This powerful deep-fringe antenna boasts "Frequency Dependent" design, a new concept in antenna design. Gain on UHF channels 14-83 is greatly improved. Just one antenna serves all your needs—VHF channels 2-13, UHF channels 14-83, and FM stereo. Has 26 active elements so that even in problem or fringe areas you get more signal power and flat response. Multiple-drive elements provide increased power. Sharply directive design fights ghosts. One-piece UHF and VHF drive lines; bracket reinforced elements for extra strength; snap-lock brackets; high-impact crossover spacers; channel type UHF elements of spring-temper aluminum. Suspension support for 1" square 123½" long boom. Preassembled. Maximum width open is 9". Adaptable to 75-ohm cable using Allied 75-ohm Conversion Kit. For 300 ohms, use foam-type lead-in; for 75 ohms, coax. Requires only one down-lead; includes UHF-VHF splitter. Impedance, 300 ohms. Less mast.

11 A 2016 ZW. Shpg. wt., 9½ lbs. 29.95

"COLORSET 20A" FRINGE ANTENNA

24.95
$5 monthly*

Receive clear pictures with this fringe area antenna. Delivers high power and flat response from suburban and problem areas. UHF up to 70 miles, VHF up to 135 miles, FM up to 70 miles. Heavy-duty 1" square boom, 93" long. Snap-lock brackets. Preassembled. Foam-type lead-in recommended. Gold-corodized for protection from rust and corrosion. Only one down-lead required. With UHF-VHF signal splitter for easy connection of leads to TV set terminals. 300 ohms. Less mast.

11 A 2017 ZW. With splitter Shpg. wt., 7¾ lbs. 24.95

"COLORSET 15A" NEAR-FRINGE ANTENNA

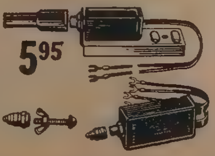
14.95

UHF up to 60 miles, VHF up to 75 miles, FM up to 60 miles. Channel-type UHF elements. 1" square heavy-duty 69" boom. Spring temper aluminum drive lines. Gold-corodized to fight corrosion. Preassembled. Foam-type lead-in recommended. 300 ohms. Less mast.

11 A 2019 ZW. Shpg. wt., 5¼ lbs. 14.95

ALLIED 75-OHM CABLE CONVERSION KIT

onvert Colorset Series 300-ohm an-
ennas to use 75-ohm coaxial cable
own-lead for improved reception.
ncludes 75-ohm transformer that
nounts in prepunched holes on Color-
et antennas. Behind set transformer
natches 75-ohm coax down-lead and
plits UHF and VHF for 300-ohm
erminals. Complete.
A 1337. Shpg. wt., 1 lb. 5.95



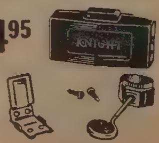
5.95

ALLIED UHF-VHF-FM SPLITTER-COUPLER

For use with Colorset Series, or other UHF-VHF-FM antennas using single down-lead. "Splits" signal from antennas to permit running 3 independent leads to receiver terminals—UHF and VHF TV, and FM. Comes complete with instructions and hardware for mounting on mast or behind receiver.

11 A 1340. Wt., 5 oz. 4.95

4.95



*Buy with no money down . . full credit details on page 438

Get Better TV-FM Reception and Save Money with an Allied VHF-UHF-FM Antenna/Rotator Outfit

DO IT YOURSELF AND SAVE UP TO $20.00 ON A COMPLETE ANTENNA PACKAGE

Get everything you need to make your complete VHF/UHF TV-FM antenna installation and save money too. Antennas are engineered by Allied for ease of installation and top performance. Receive all TV channels from 2 to 83, plus FM. Each of the antenna packages below includes a Colorset antenna—Model 65, 60A, 55A, 26A, or 20A. You may order a package including manual rotator or automatic rotator. Rotator lets you aim antenna directly at each station. Each antenna package also includes a 10-ft. corrosion-proof steel mast, chimney mount, 50′ all-channel foam transmission line, 50′ rotator cable. 2 mast snap-on stand offs, three 3½″ and one 7½″ wood screw eye stand offs.

PICK THE ANTENNA-ROTATOR PACKAGE THAT'S BEST FOR YOU

ANTENNA WITH ALLIANCE T-45 MANUAL ROTATOR AND MOUNT

Colorset 65 antenna, T-45 control box, rotator, cable
Accessory Mounting Kit

COMPLETE OUTFIT

Low as **46**^{88}

ANTENNA WITH CDE AR-33 AUTOMATIC ROTATOR, MOUNT

Colorset 65 antenna, AR-33 control box, rotator, cable
Accessory Mounting Kit

COMPLETE OUTFIT

Low as **69**^{85}

SUPER-POWER ANTENNA/MANUAL ROTATOR SYSTEM

Separately, $79.88. Includes: Colorset 65 Antenna; Alliance T-45 Manual Rotator with control box and cable; Finco 10-ft. corrosion-proof steel mast with chimney mount, 50′ all-channel foam transmission line, 2 snap-on stand offs, three 3½″ and one 7½″ wood screw eye stand offs, instructions. Antenna features frequency-dependent design for sharper-than-ever UHF and VHF reception. The 34 physical elements on the twin-boom construction operate as 68 half-wave elements to provide movie-clear pictures in color and black-and-white, and extra-clear FM. Maximum mile range: VHF, 200; UHF, 100; FM, 100. 300 ohms. Just touch the control bar on the control unit, and rotator turns antenna at 1 rpm clockwise or counter-clockwise until you release—pointer shows direction. Extra control units may be added. U.L. Listed. 117 VAC.
11 A 0420 L3Z W. Shpg. wt., 38¼ lbs.......................**63.88**

FAR-FRINGE ANTENNA/MANUAL ROTATOR SYSTEM

Colorset 60A Antenna, T-45 Rotator, all access. above. 30 elements. Max. mile range: VHF, 190; UHF, 90; FM, 100. Wt., 36 lbs.
11 A 0421 L3Z W. *Separately, $69.88* **58.88**

MID-FRINGE ANTENNA/MANUAL ROTATOR SYSTEM

Colorset 55A Antenna, T-45 Rotator, all access. above. 28 elements. Max. mile range: VHF, 180; UHF, 80; FM, 90. Wt., 33½ lbs.
11 A 0422 L3Z W. *Separately, $64.88*.......................**54.88**

SUBURBAN ANTENNA/MANUAL ROTATOR SYSTEM

Colorset 26A Antenna, T-45 Rotator, all access. above. 13 elements. Max. mile range: VHF, 165; UHF, 90; FM, 90. Wt., 31½ lbs.
11 A 0423 L3Z W. *Separately, $59.88*.......................**50.88**

METROPOLITAN ANTENNA/MANUAL ROTATOR SYSTEM

Colorset 20A Antenna, T-45 Rotator, all access. above. 10 elements. Max. mile range: VHF, 135; UHF, 70; FM, 75. Wt., 29¾ lbs.
11 A 0424 L3Z W. *Separately, $54.88*.......................**46.88**

SUPER-POWER ANTENNA/AUTOMATIC ROTATOR SYSTEM

Separately, $105.85. System includes: Colorset 65 Antenna; Cornell-Dubilier AR-33 Automatic Rotator with control box and cable; 10-ft. corrosion-proof steel mast with chimney mount, 50′ all-channel foam transmission line, 2 snap-on stand offs, three 3½″ and one 7½″ wood screw eye stand offs, instructions. Antenna boasts swivel UHF section for independent orientation of VHF and UHF. Dual reflectors give high front-back ratio for maximum ghost rejection. Antenna boom length, 210″. 300 ohms. Solid-state automatic rotator system allows you to preset antenna direction for up to 5 channels. Then sit back in your chair, press the button on the control unit for the desired channel, and the antenna rotates automatically to the preset direction for the sharpest possible color or black-and-white picture. U.L. listed. For 117 VAC.
11 A 0425 L3Z W. Shpg. wt., 43¼ lbs.......................**85.85**

FAR-FRINGE ANTENNA/AUTOMATIC ROTATOR SYSTEM

Colorset 60A Antenna, AR-33 Rotator, and all accessories above. Antenna boom length, 178″. Mileage ranges at left. Wt., 41 lbs.
11 A 0427 L3Z W. *Separately, $95.85*.......................**81.85**

MID-FRINGE ANTENNA/AUTOMATIC ROTATOR SYSTEM

Colorset 55A Antenna, AR-33 Rotator, and all accessories above. Antenna boom length, 159″. Mileage ranges at left. Wt., 38½ lbs.
11 A 0428 L3Z W. *Separately, $90.85*.......................**77.85**

SUBURBAN ANTENNA/AUTOMATIC ROTATOR SYSTEM

Colorset 26A Antenna, AR-33 Antenna, and all accessories above. Antenna boom length, 123½″. Mileage ranges at left. Wt., 36½ lbs.
11 A 0429 L3Z W. *Separately, $85.85*.......................**73.85**

METROPOLITAN ANTENNA/AUTOMATIC ROTATOR SYSTEM

Colorset 20A Antenna, AR-33 Antenna, and all accessories above. Antenna boom length, 104″. Mileage ranges at left. Wt., 34¾ lbs.
11 A 0430 L3Z W. *Separately, $80.85*.......................**69.85**

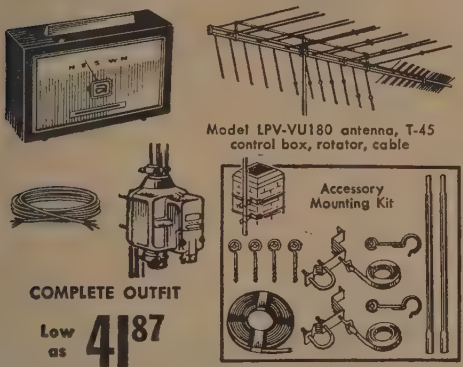
See Pages 384, 385, 389 for Complete Colorset, JFD Antenna Information

Save up to 11% on a JFD Antenna plus Rotator
.. 82-Channel UHF-VHF-FM Antenna Outfit

PICK THE JFD ANTENNA SYSTEM THAT FILLS YOUR SPECIAL NEEDS

njoy best possible TV and FM coverage with a deluxe antenna sys-m. There's nothing else to buy—you get everything you need for complete installation. Available in two different combinations—anual-control rotator outfit or pushbutton rotator outfit. And you save money, too. Outfit prices are less than the total price of individual components purchased separately. Take advantage of this Allied offer and enjoy improved reception with a complete antenna outfit.

ANTENNA WITH ALLIANCE T-45 MANUAL ROTATOR AND MOUNT



Model LPV-VU180 antenna, T-45 control box, rotator, cable

COMPLETE OUTFIT Low as 41.87

EXTRA-POWER ANTENNA/MANUAL ROTATOR SYSTEM

parately, $78.63. Includes: JFD LPV-VU180 Antenna; Alliance -45 Manual Rotator with control box and cable; 10-ft. corrosion-oof steel mast with chimney mount, 50′ all-channel foam trans-ission line, 2 snap-on stand offs, three 3½″ and one 7½″ wood rew eye stand offs, instructions. Antenna features frequency inde-endent log-periodic design for broad-band performance without scriminating against any channel or frequency. Receives channels 83 plus FM. Preassembled. Has 35 elements. Max. mile range: HF, 150; UHF, 90; FM, 60. 300 ohms. Rotator turns antenna ockwise or counter-clockwise. Just touch the control bar on the nit, antenna rotates at 1 rpm until you release bar—pointer shows irection. Extra units may be added. U.L. Listed. 117 VAC.
A 0431 L3ZW. Shpg. wt., 42 lbs. **71.63**

FAR-FRINGE ANTENNA/MANUAL ROTATOR SYSTEM

PV-VU150 Antenna. T-45 Rotator, all access. above. 30 elements. lax. mile range: VHF, 125; UHF, 80; FM, 50. Wt. 37 lbs.
A 0432 L3ZW. *Separately, $71.68* **65.68**

MID-FRINGE ANTENNA/MANUAL ROTATOR SYSTEM

PV-VU120 Antenna. T-45 Rotator, all access. above. 26 elements. lax. mile range: VHF, 110; UHF, 70; FM, 50. Wt., 37 lbs.
A 0433 L3ZW. *Separately, $64.70* **59.70**

NEAR-FRINGE ANTENNA/MANUAL ROTATOR SYSTEM

PV-VU90 Antenna, T-45 Rotator, all access. above. 21 elements. lax. mile range: VHF, 90; UHF, 60; FM, 40. Wt., 34 lbs.
A 0434 L3ZW. *Separately, $57.75* **52.75**

SUBURBAN ANTENNA/MANUAL ROTATOR SYSTEM

PV-VU60 Antenna, T-45 Rotator, all access. above. 14 elements. lax. mile range: VHF, 70; UHF, 40; FM, 30. Wt., 32 lbs.
A 0435 L3ZW. *Separately, $50.35* **46.35**

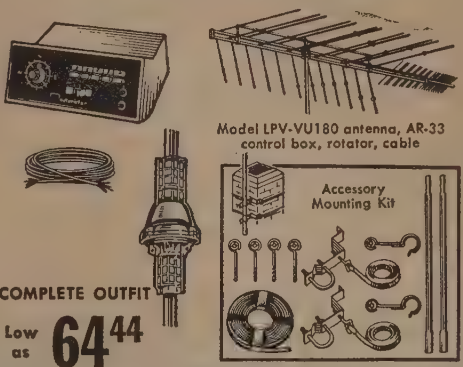
METROPOLITAN ANTENNA/MANUAL ROTATOR SYSTEM

PV-VU40 Antenna, T-45 Rotator, all access. above. 11 elements. lax. mile range: VHF, 50; UHF, 30; FM, 25. Wt., 29½ lbs.
A 0436 L3ZW. *Separately, $46.20* **43.20**

CLOSE-RANGE ANTENNA/MANUAL ROTATOR SYSTEM

PV-VU30 Antenna, T-45 Rotator, all access. above. 9 elements. lax. mile range: VHF, 40; UHF, 30; FM, 20. Wt., 27½ lbs.
A 0437 L3ZW. *Separately, $44.37* **41.87**

ANTENNA WITH CDE AR-33 AUTOMATIC ROTATOR, MOUNT



Model LPV-VU180 antenna, AR-33 control box, rotator, cable

COMPLETE OUTFIT Low as 64.44

EXTRA-POWER ANTENNA/AUTOMATIC ROTATOR SYSTEM

Separately, $104.60. JFD LPV-VU180 Antenna; Cornell-Dubilier AR-33 Automatic Rotator with control box and cable; 10-ft. corrosion-proof steel mast with chimney mount, 50′ all-channel foam transmission line, 2 snap-on stand offs, three 3½″ and one 7½″ wood screw eye stand offs, and instructions. Antenna boom length, 206″. Maximum width, 92″. Impedance, 300 ohms. Rotator system features all-silicon transistor circuit. Each of five pushbuttons on control unit can be set for a apecific TV station. Just press the button for the desired channel—antenna rotates automatically to the preset direction for the finest possible picture. Completely silent—accurately positions antenna within ±1% for precise directivity. U.L. Listed. 117 VAC.
11 A 0438 L3ZW. Shpg. wt., 47 lbs. **93.60**

FAR-FRINGE ANTENNA/AUTOMATIC ROTATOR SYSTEM

LPV-VU150 Antenna, AR-33 Rotator, all accessories above. Antenna boom length, 175¾″. Maximum width, 92½″. Wt., 42 lbs.
11 A 0439 L3ZW. *Separately, $97.65* **87.65**

MID-FRINGE ANTENNA/AUTOMATIC ROTATOR SYSTEM

LPV-VU120 Antenna, AR-33 Rotator, all accessories above. Antenna boom length, 157″. Maximum width, 92½″. Wt., 42 lbs.
11 A 0440 L3ZW *Separately, $90.67* **81.67**

NEAR-FRINGE ANTENNA/AUTOMATIC ROTATOR SYSTEM

LPV-VU90 Antenna, AR-33 Rotator, all accessories above. Antenna boom length, 119″. Maximum width, 92½″. Wt., 39 lbs.
11 A 0441 L3ZW. *Separately, $83.72* **75.72**

SUBURBAN ANTENNA/AUTOMATIC ROTATOR SYSTEM

LPV-VU60 Antenna, AR-33 Rotator, all accessories above. Antenna boom length, 97″. Maximum width, 91″. Wt., 37 lbs.
11 A 0450 L3ZW. *Separately, $76.32* **68.32**

METROPOLITAN ANTENNA/AUTOMATIC ROTATOR SYSTEM

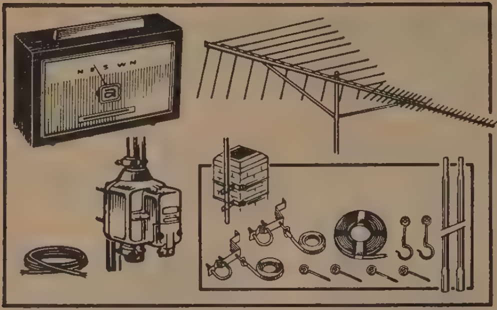
LPV-VU40 Antenna, AR-33 Rotator, all accessories above. Antenna boom length, 67½″. Maximum width, 88″. Wt., 34½ lbs.
11 A 0451 L3ZW. *Separately, $72.17* **65.17**

CLOSE-RANGE ANTENNA/AUTOMATIC ROTATOR SYSTEM

LPV-VU30 Antenna, AR-33 Rotator, all accessories above. Antenna boom length, 46½″. Maximum width, 91″. Wt., 32½ lbs.
11 A 0452 L3ZW. *Separately, $70.44* **64.44**

HIPPING NOTE: Items with suffix U, W or Z in stock no. are sent truck or express. See Ordering Information pages.

Finco VHF-UHF-FM Color Spectrum 75-ohm Coax Antenna – Rotator Systems for Better Reception



SAVE UP TO $15.26 ON OUR BEST FINCO SYSTEM

FOR FINEST FRINGE AREA RECEPTION

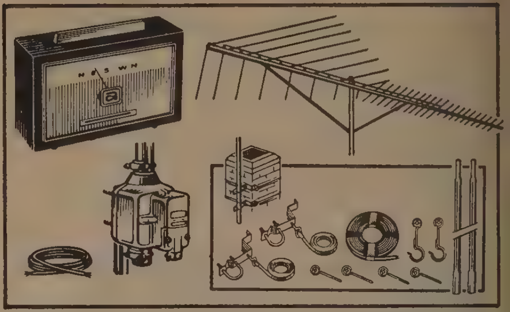
79^{95}

- Frequency-Dependent Design for Sharpest Pictures
- VHF to 160 Miles, UHF to 100 Miles, FM to 70 Miles
- Complete with Mast, Downlead, and all Accessories

Separately, $89.24. Provides maximum signal strength even in the weakest fringe areas. Includes Finco XCS-D3 Antenna with coaxial connectors, antenna transformer and behind-set transformer/splitter. Sturdy, preassembled snap-out construction for durability and easy installation. Isolation stub prevents ghosts and interference. Has 19 driven, and 17 parasitic, elements. Length, 204⅛″. Alliance T-45 Manual Rotator has 100′ 5-conductor connecting cable. Control unit, 4½x6½x2½″. With 10′ corrosion-proof steel mast, chimney mount, 100′ foam coax cable, 2 mast standoffs, three 3½″ and one 7½″ wood screw standoffs. U.L. Listed. 110-120 VAC.

11 A 0456 L4ZW. Shpg. wt., 43 lbs.......................79.95

11 A 0457 L4ZW. *Separately, $115.21.* Above, except with CDE AR-33 Automatic Rotator. 110 VAC. Wt., 48 lbs...........99.95



SAVE UP TO $11.03 ON POWERFUL FINCO SYSTEM

FOR IMPROVED COLOR TV AND STEREO FM

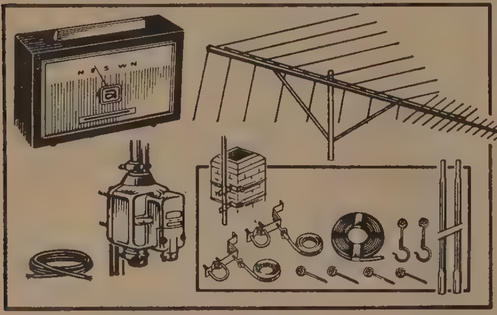
74^{94}

- VHF to 135 Miles, UHF to 100 Miles, FM to 60 Miles
- Frequency-Dependent Design for Finest Performance
- High Front-to-Back Ratio for Best Reception

Separately, $82.94. For weak VHF and very weak UHF fringe areas. Includes Finco XCS-C3 Antenna with coaxial connectors, antenna transformer and behind-set transformer/splitter. Features frequency-dependent design and isolation stub for strong signals. Has 17 driven, and 13 parasitic, elements. Gold-corodized for long-lasting beauty. Length, 166½″. Alliance T-45 Manual Rotator rotates clockwise or counter-clockwise at the touch of the control bar, includes 100′ 5-conductor cable. With 10′ corrosion-proof steel mast, chimney mount, 100′ foam coax cable, two mast standoffs, three 3½″ and one 7½″ wood screw standoffs. U.L. Listed. 110-120 VAC.

11 A 0458 L4ZW. Shpg. wt., 39 lbs.......................74.94

11 A 0459 L4ZW. *Separately, $108.91.* Above, except with CDE AR-33 Automatic Rotator. 110 VAC. Wt., 44 lbs...........97.88



SAVE UP TO $11.00 ON VALUE-PRICED SYSTEM

FOR SUPERIOR LONG-DISTANCE RECEPTION

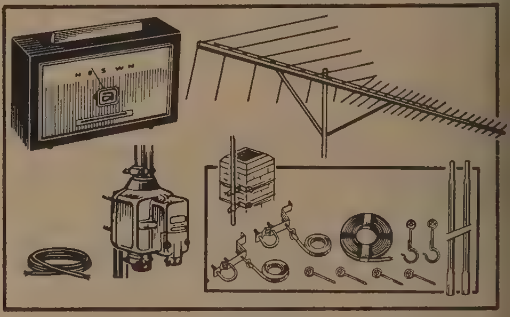
69^{90}

- Frequency-Dependent Design for Sharpest Pictures
- VHF to 135 Miles, UHF to 80 Miles, FM to 60 Miles
- Complete with Mast, Downlead, and all Accessories

Separately, $77.90. For weak VHF and UHF fringe areas. Includes Finco XCS-C2 Antenna with coaxial connectors, antenna transformer and behind-set transformer/splitter. Frequency-dependant design assures maximum antenna gain for the higher TV channels and stereo FM, assures greatest signal power where it's needed most. Gold-corodized elements and one-piece drive line. Boom length, 138¼″. Alliance T-45 Manual Rotator rotates at 1 rpm, includes 100′ 5-conductor cable. With 10′ corrosion-proof steel mast, chimney mount, 100′ foam coax cable, two mast standoffs, three 3½″ and one 7½″ wood screw standoffs. U.L. Listed. 110-120 VAC.

11 A 0462 L4ZW. Shpg. wt., 38 lbs.......................69.90

11 A 0463 L4ZW. *Separately, $103.87.* Above, except with CDE AR-33 Automatic Rotator. 110 VAC. Wt., 43 lbs...........92.87



SAVE UP TO $12.66 ON LOWEST PRICED SYSTEM

FOR FINE FRINGE AREA RECEPTION

69^{79}

- Frequency-Dependent Design for Best Performance
- VHF to 95 Miles, UHF to 100 Miles, FM to 50 Miles
- With All Connectors, Transformers, Accessories

Separately, $76.64. Provides good fringe area reception. Includes Finco XCS-B3 Antenna with coaxial connectors, antenna transformer and behind-set transformer. Features frequency-dependent design with isolation stub to provide vivid, ghost-free TV and FM reception. Has 15 driven, and 13 parasitic, elements. Antenna boom length, 139⅛″. Alliance T-45 Manual Rotator orients your antenna at the touch of the control bar for strongest signal and best reception, includes 100′ 5-conductor cable. With 10′ corrosion-proof steel mast, chimney mount, 100′ foam coax cable, two mast standoffs, three 3½″ and one 7½″ wood screw standoffs. U.L. Listed. 110-120 VAC.

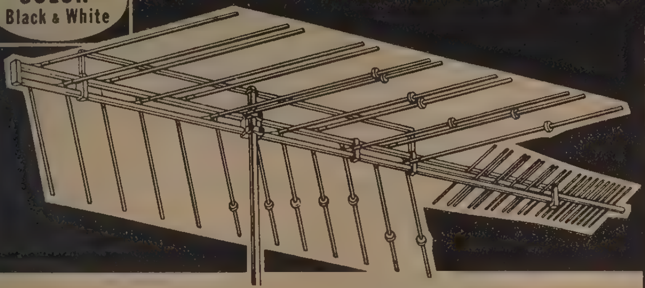
11 A 0464 L4ZW. Shpg. wt., 36 lbs.......................69.79

11 A 0465 L4ZW. *Separately, $102.61.* Above, except with CDE AR-33 Automatic Rotator. 110 VAC. Wt., 41 lbs...........89.95

SHIPPING NOTE: Items with suffix U, W or Z in stock no. sent truck or express. See Ordering Information pages.

DESIGNED for COLOR and Black & White

JFD VHF-UHF-FM Television Antennas



LOG-PERIODIC VHF-UHF-FM ANTENNAS

ow as 14^{54}

- Receive TV Channels 2-83 plus FM
- Sharp Directivity Fights Ghosts
- Gold-Alodizing Fights Corrosion
- Finest Reception on All Bands
- Sharp Black-and-White Pictures
- With UHF-VHF-FM Splitter

'oday's most popular log-periodic design offers extra color sensitivity and efficiency (see escription at right). Sturdy, twin square aluminum crossarms, solid aluminum matching ransformers, LPV-VU180, LPV-VU150, and LPV-VU120 have boom braces for crossarm upport. All log-periodic antennas below have line splitters to run separate leads to VHF, JHF, FM terminals. All antennas are 300 ohms inpedance. Foam-type lead-in recomiended. Less mast and 300-ohm lead-in cable.

Stock No.	Model No.	Elements	Boom Lgth.	Max. Width	Max. Range Miles			Shpg. Wt., Lbs.	EACH
					VHF	UHF	FM		
1 A 1666 ZW	LPV-VU180	35	206″	92″	150	90	60	20	48.70
1 A 1667 ZW	LPV-VU150	30	175¾″	92½″	125	80	50	15	41.75
1 A 1668 ZW	LPV-VU120	26	157″	92½″	110	70	50	15	34.77
1 A 1669 UW	LPV-VU90	21	119″	92½″	90	60	40	12	27.82
1 A 1670 UW	LPV-VU60	14	97″	91″	70	40	30	10	20.42
1 A 1671 UW	LPV-VU40	11	67½″	88″	50	30	25	7½	16.27
1 A 1672 XW	LPV-VU30	9	46½″	91″	40	30	20	5½	14.54

HERE'S WHY JFD ANTENNAS OFFER SO MUCH VALUE

Built for color or black-and-white TV, plus stereo FM. Deliver excellent TV pictures in virtually every locale. LPV antennas feature harmonically resonant V-elements operating on the log-periodic cellular principle in the fundamental and 3rd harmonic modes.

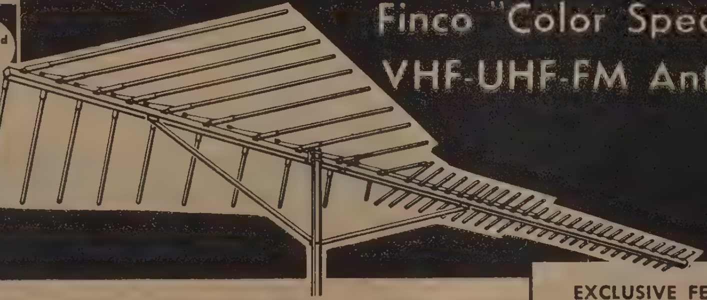
Provide up to 14 dB gain with extra power on high channels, where it's needed most. Frequency-independent log-periodic design delivers broadband performance without discriminating against any channel or frequency. Response is flat within ±½ dB on all bands. Sharpest directivity of any all-band antenna fights noise, ghosts and interference for superb reception.

Planar-grid design increases gain, flattens response and narrows beam width for better UHF reception. Capacitor-coupled dipoles vastly increase the number of working elements for maximum gain and directivity on all channels.

"Flip-Quick" lets you snap elements into place in seconds. Gold Alodized finish is electrically conductive and fights corrosion. Life-time stainless-steel take-off terminals. Oversize "tank-turret" element bracket; ultra-durable Polypropylene "X" insulators; twin U-bolts with 6″ mast grip span; and permanently riveted aluminum drive-line rod.

DESIGNED for COLOR and Black & White

Finco "Color Spectrum" VHF-UHF-FM Antennas



Low as 18^{87}

- Frequency-Dependent Design for Finest TV or FM
- Sturdy One-Piece Drive Line
- Low-Loss 75-Ohm Coax and 300-Ohm Twin-Lead Types
- Isolation Stub Prevents Ghosts

'ept-element Ve-Log antennas offer su-rb VHF and UHF reception of color and ack-and-white. Drive system features in-ased spacing toward the high end of IF and UHF bands for flat response and ghest power on each channel. High front-back ratio plus built-in isolation stub hts ghosts. Choice of six sizes for either 75 300 ohm down lead, plus UVF-25 listed low. 75-ohm models assure superior color tures with low signal loss and excellent ielding for low noise.

Construction features include heavy-duty 1″ square boom in "lock-tite" no-tilt saddle and heavily sleeved elements to combat high winds. Gold-corodized to fight corrosion and give long-lasting beauty. Preassembled snap-out construction simplifies installation. 300-ohm antennas include behind-set splitter—foam-type lead is recommended. 75-ohm models include coaxial cable connectors and antenna transformer plus behind-set transformer/splitter. All antennas require down lead. Less mast.

EXCLUSIVE FEATURES OF FINCO ANTENNAS

All Finco antennas have these quality features: One Piece Drive Line with air insulated crossover spacer, triple thick sleeved elements, drive line pedestals to assure positive spacing, double contact to drive line, built-in isolating stub system, non-breakable side-to-side red-color terminals, metal reinforced insulators with insert cups and heavy-duty rivets, 1″ square boom with "lock-tite" no-tilt saddle bracket to fight high winds.

75-Ohm Coaxial Cable Color-Spectrum VHF/UHF/FM Antennas

Stock No.	Mfr's Type	Elements		Max. Range Miles			Boom Lgth.	Wt., Lbs.	EACH
		VHF	UHF	VHF	UHF	FM			
1 A 1458 ZW	XCS-D3	10	26	160	100	70	204⅛″	14	49.42
1 A 1459 ZW	XCS-C3	8	22	135	100	60	166½″	10	43.12
1 A 1460 ZW	XCS-C2	8	12	135	80	60	138¼″	9	38.08
1 A 1461 ZW	XCS-B3	6	22	95	100	50	139⅛″	7	36.82
1 A 1462 ZW	XCS-B2	6	12	95	80	50	111⅛″	6½	30.52
1 A 1463 ZW	XCS-B1	6	7	95	50	50	93″	6	24.22

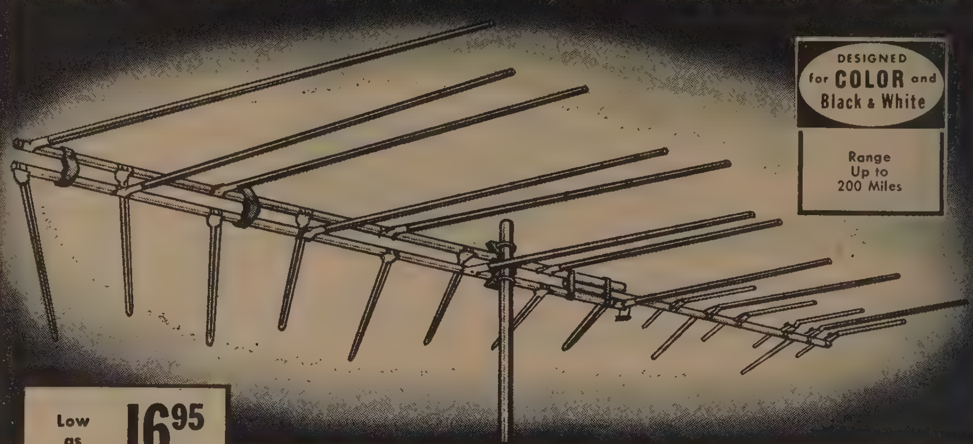
300-Ohm Ve-Log VHF/UHF/FM Antennas

Stock No.	Mfr's Type	Elements	EACH
11 A 1464 ZW	CS-D3	36	43.50
11 A 1465 ZW	CS-C3	30	37.77
11 A 1466 ZW	CS-C2	20	32.73
11 A 1467 ZW	CS-B3	28	31.47
11 A 1468 ZW	CS-B2	18	25.17
11 A 1469 ZW	CS-B1	13	18.87

A 1457 ZW. Finco UVF-25 Ve-Log VHF/UHF/FM Antenna. 24 elements. 300 ohms. (See page 383 for Illus.). 11 lbs. 49.95

NOTE: 300-Ohm Antennas Have Same Range, Boom Length and Shpg. Wt. as 75-Ohm Antennas with the Same Number of Elements

Allied VHF Antennas...Up to 200-mile Range


DESIGNED for COLOR and Black & White
Range Up to 200 Miles

Low as **16.95**

SUPER STAR DEEP-FRINGE VHF ANTENNA VALUES

- Advanced Theory of Increasing Gain versus Frequency
- Dual Band Vee Elements for Optimum Performance
- 11¾″ Boom with Sagproof Suspension Rods
- Weather Protected by Gold-Corodized Finish

5-STAR. Allied's most popular VHF antenna. This super-powered model has high sensitivity to provide superior reception of color and black-and-white. Dual vee-type elements operate as ten half-wave elements on low-band channels 2 to 6, and 28 half-wave elements on high-band channels 7 to 13. High-impact, box girder design insulators. Double U-bolt assembly for greater clamping strength and perfect alignment.

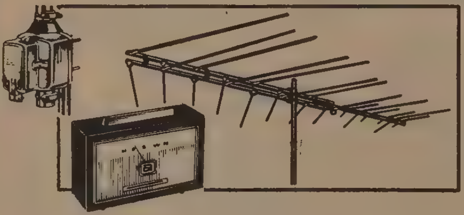
Sagproof suspension system features a big 11¾-foot twin boom with sturdy bracing rods that increase boom strength almost ten times. Flanged quadri-lock double snap action element brackets for extra strength and positive alignment. Reinforced sleeve elements at point of snap-out action give extra protection against effects of high winds and ice. Advanced theory of increasing gain versus frequency insures highest quality reception, even in suburban and deep-fringe areas. Gold-corodized finish, even on the brackets, fights corrosion. Corodizing does not obstruct but rather enhances current flow—another plus for fringe area reception. Since corodizing acts as a conductor, it need not be removed at contact points (unlike anodizing, which acts as a insulator). All these elements work together to pull in signals up to 200 miles. Impedance, 300 ohms. Less mast.
11 A 1014 ZW. Shpg. wt., 15 lbs. **29.95**

4-STAR. High-gain for semi-fringe areas and difficult terrain. Twin 95″ boom of square high-strength aluminum alloy. Nine "V" elements operate as 7 half-wave elements on Ch. 2-6 and 20 half-wave elements on Ch. 7-13. Range up to 150 miles. Quadri-lock double snap action brackets. 300 ohns. Less mast.
11 A 1016 ZW. Shpg. wt., 8¼ lbs. **24.95**

3-STAR. High-sensitivity and directivity for excellent performance in suburban and semi-fringe areas. Seven "V" elements operate as 5 elements on Ch. 2-6, 14 elements on Ch. 7-13. Range up to 100 miles. Twin 65″ boom. Gold-corodizing. 300 ohms.
11 A 1072 ZW. Shpg. wt., 7 lbs. **16.95**

SAVE UP TO 17% ON COMPLETE ANTENNA AND ROTATOR OUTFITS

HEAVY-DUTY FRINGE AREA VHF ANTENNA AND MANUAL ROTATOR SYSTEM OUTFIT

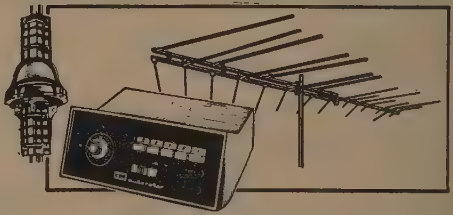


Low as **36.93**

- Perfect antenna adjustment
- Extra control units

Allied antenna and Alliance T-45 manual rotator system. Rotates at 1 rpm until you release the bar. Special feature lets you add extra control units if you have more than 1 TV set—control antenna from each set. Rotator unaffected by motor current, cable length or line voltage. Rotates clockwise or counterclockwise. Takes 5 conductor cable. Control unit, 4½x6½x2½″. T-45 listed alone on page 396. 110-120 VAC. U.L. Listed.
11 A 0071 L2ZW. T-45 with 5-Star. *Separately, $53.93*....**50.93**
11 A 0072 L2ZW. T-45 with 4-Star. *Separately, $48.93*....**41.93**
11 A 0073 L2ZW. T-45 with 3-Star. *Separately, $40.93*...,**36.93**

FRINGE AREA VHF ANTENNA AND FULLY-AUTOMATIC SOLID-STATE ROTATOR SYSTEM



Low as **58.90**

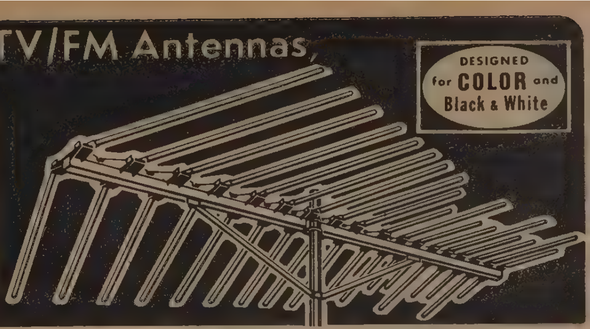
- Transistorized design
- Pushbutton control box

Allied antenna and Cornell-Dubilier AR-33 automatic pushbutton rotator system. Has 5 pushbuttons which can be set for a specific station. When you switch channels, just press the button, antenna rotates automatically. Compass dial for manual control. Solid-state circuitry. Silently, accurately positions within ±1%. Weather protected. High torque motor, low temperature operation. Takes 5-conductor cable. U.L. Listed. 115 VAC.
11 A 0074 L2ZW. AR-33 with 5-Star. *Separately, $79.90*..**71.90**
11 A 0418 L2ZW. AR-33 with 4-Star. *Separately, $74.90*..**63.90**
11 A 0419 L2ZW. AR-33 with 3-Star. *Separately, $66.90*..**58.90**

Finco, JFD VHF-TV/FM Antennas

FREQUENCY-DEPENDENT DESIGN

Frequency-Dependent concept gives you maximum performance on every VHF-TV channel. Increased element spacing toward high-frequency end of band assures highest signal-pulling power on highest channels, where it's needed most. You get sharp color and black-and-white reception even in fringe areas. Flat response on every channel; high front-to-back ratio. And there is a rugged, powerful model for every signal area and budget.


DESIGNED for COLOR and Black & White

FINCO FREQUENCY-DEPENDENT VHF-TV/FM COLOR ANTENNAS—COAX OR 300-OHM

Low as 10^{98}

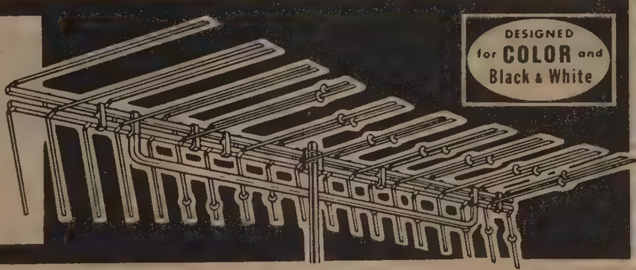
- Extra-sharp color and black-and-white pictures
- Low-loss coax or 300-ohm twin-lead models
- One-piece drive line with isolating stub

Ve-log antennas feature Frequency-Dependent design for highest power and flat response on each channel. Provides high front-to-back ratio. Super-sharp pictures in color or black-and-white on channels 2-13, plus outstanding FM and stereo FM performance. Ten models give choice of range (up to 200 miles) and lead-in impedance—standard 300 ohms or 75-ohm shielded coaxial cable. 75-ohm antennas offer finest color reception, require no lead-in stand offs. Rugged construction, with 1" square boom in "lock-tite" no-tilt saddle, triple-thick sleeved elements. Continuous one-piece low-loss drive line has insulated crossover spacer—pedestals assure positive spacing. Boom and elements are gold-corodized to fight corrosion. All antennas are 100% preassembled for easier installation. Foam-type lead-in recommended for 300-ohm antennas. 75-ohm models include coax connectors, antenna transformer and behind-set transformer. Less mast. Accessory kit listed below is perfect for installation of all 300-ohm models. *Antennas on this page sent by truck or express.*

75-Ohm Coaxial Cable Color-Spectrum Antennas								300-Ohm Ve-Log Antennas†			
Stock No.	Mfr's Type	Elements	TV Range Up to	FM Range Up to	Boom Lgth.	Wt., Lbs.	EACH	Stock No.	Mfr's Type	Elements	EACH
11 A 1712 ZW	XCS-V18	18	200 miles	90 miles	181"	15	40.42	11 A 1717 ZW	CS-V18	18	35.60
11 A 1713 ZW	XCS-V15	15	175 miles	75 miles	155"	14	35.38	11 A 1718 ZW	CS-V15	15	30.65
11 A 1714 ZW	XCS-V10	10	125 miles	50 miles	119"	10	28.32	11 A 1719 ZW	CS-V10	10	22.65
11 A 1715 UW	XCS-V7	7	100 miles	50 miles	81"	7	20.95	11 A 1720 UW	CS-V7	7	15.72
11 A 1716 XW	XCS-V5	5	75 miles	50 miles	54"	5	16.35	11 A 1721 XW	CS-V5	5	10.98

LOG-PERIODIC DESIGN

Delivers broadband performance without discriminating against any channel or frequency. Antennas are designed to deliver camera-lens sharpness in virtually every location. Developed at the University of Illinois Research Laboratories and proved in Air Force satellite telemetry. LPV antennas feature harmonically resonant V-elements operating on the log-periodic cellular principle in the fundamental and 3rd harmonic modes.


DESIGNED for COLOR and Black & White

JFD LOG-PERIODIC VHF-TV/FM COLOR ANTENNAS FOR UP TO 200-MILE RANGE

Low as 12^{98}

- Sharp directivity fights snow and ghosts
- Gold-alodized finish prevent corrosion
- Antennas supplied completely preassembled

Antennas feature frequency-independent log-periodic design for sharp, clear pictures free from snow and ghosts on all VHF-TV channels. Deliver both color and black-and-white TV, plus stereo and mono FM. Boast consistently flat (±½ dB) response for top color reception. Sharp directivity fights noise, ghosts, interference and all other unwanted signals. Capacitor-coupled dipoles give uniform gain on all VHF channels. Twin square aluminum booms. "Flip-Quick" lets you snap elements into place in seconds. Gold-alodized finish fights corrosion, is electrically conductive. Lifetime stainless-steel take-off terminals. LPV-TV190, LPV-TV160, LPV-TV130, and LPV-TV100 antennas have boom braces. Others listed have same rugged construction, need no boom braces. Foam-type lead-in recommended. Less mast. Accessory kit listed below is perfect for installation. *Sent truck or express.*

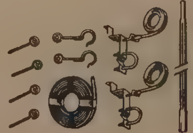
Stock No.	Model No.	Elements	Boom Length	Maximum Width	Range in Miles	Impedance in Ohms	Wt., Lbs.	EACH
11 A 1680 ZW	LPV-TV190	19	205"	92"	Up to 200	300	25	52.67
11 A 1681 ZW	LPV-TV160	16	176"	92"	Up to 175	300	19	40.59
11 A 1682 ZW	LPV-TV130	13	143"	92"	Up to 150	300	15	33.81
11 A 1683 ZW	LPV-TV100	10	112¾"	92"	Up to 125	300	11	27.90
11 A 1684 ZW	LPV-TV80	8	81"	91"	Up to 100	300	8	21.46
11 A 1685 ZW	LPV-TV60	6	70¾"	91"	Up to 75	300	6	16.13
11 A 1686 ZW	LPV-TV50	5	56"	86"	Up to 50	300	4	12.98

COMPLETE ACCESSORY KIT FOR INSTALLATION OF ANTENNAS

5^{95}

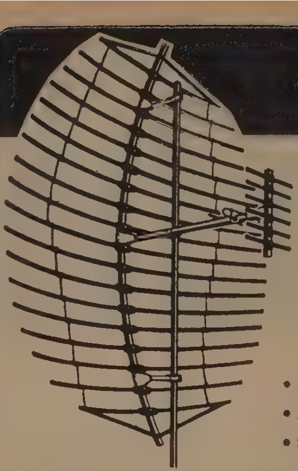
Vine-piece accessory kit includes everything you need to install your own antenna. Package contains one chimney mount, one 50-ft. UHF/VHF foam transmission line, one 10-ft. corrosion-proof steel mast; two mast snap-on stand offs; three 3½-inch wood screw eye stand offs; one 7½-inch wood screw eye stand off, and complete instruction sheet.

11 A 1050 XW. Shpg. wt., 12 lbs. . . 5.95



NOTE: †300-Ohm Antennas Have Same Range, Boom Length and Shpg. Wt. as 75-Ohm Antennas with the Same Number of Elements

Allied UHF Television Antennas



PARABOLIC UHF TV ANTENNAS

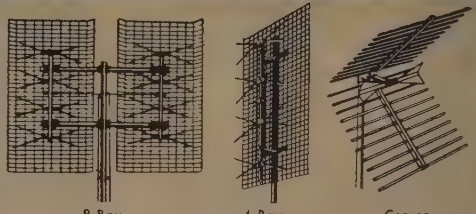
Low as

16⁹⁵

- Choice of 7-ft. or 5-ft. Screen
- All-Aluminum, Gold-Corodized
- Snap-Out Design for Fast Installation

7-FT. DIAMETER. Boasts the same type of configuration used for satellite tracking. Radar-type design with parabolic screen offers extremely sharp directivity for good reception of UHF channels 14-83, up to 130 miles away. Screen is curved to focus signals on special collector elements, offering maximum signal strength with excellent rejection of ghosts and other unwanted signals. Gain ranges from 17 dB on Channel 14, to 21 dB on Channel 83. 300 ohms. Foam-type lead-in recommended. Less mast.
11 A 1706 UW. Shpg. wt., 13½ lbs. 29.95

5-FT. DIAMETER. Same snap-out parabolic design as above. Effective range up to 80 miles. Gain: 14 to 18.6 dB. 300 ohms. Foam-type lead-in recommended. Less mast.
11 A 1015 XW. Shpg. wt., 6½ lbs. 16.95



8-BAY UHF BOW-TIE ANTENNA

"Fidelity-phased" colinear design antenna with synchronized elements for sharp directivity and high gain on UHF channels 14 through 83. Reception up to 75 miles. For excellent color or black-and-white reception. Consists of two 4-bay units with solid aluminum-rod harness. Double cross member. Rustproof aluminum hardware. Preassembled. Fits any size mast. 300 ohms. Foam-type lead-in recommended. Less mast.
11 A 1709 UW. Shpg. wt., 12 lbs. 9.95

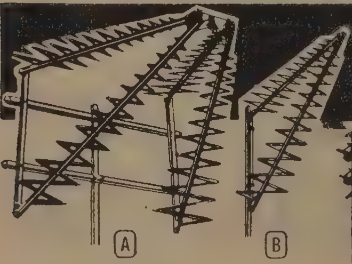
4-BAY UHF BOW-TIE ANTENNA

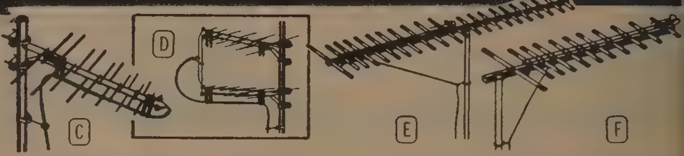
Provides excellent color and black-and-white reception of channels 14 through 83. Range to 55 miles. Rugged aluminum. 300 ohms. Foam-type lead-in recommended. Less mast.
11 A 1064 XW. Shpg. wt., 5 lbs. 3.95

CORNER-REFLECTOR ANTENNA

Large screen for extra-sharp directivity and high gain. Fights ghosts, snow and other annoying interference. Range up to 45 miles. All-aluminum with corrosion-resistant gold-corodized finish. 300 ohms. Less mast. Foam-type lead-in recommended.
11 A 1070 XW. Shpg. wt., 5 lbs. 3.95

JFD, BLONDER-TONGUE AND FINCO UHF ANTENNAS FOR SUPERIOR RECEPTION





JFD "ZIG-A-LOG" UHF ANTENNAS

A **MODEL LPV-ZU20 TWO-BAY ANTENNA.** Features advanced log-periodic design for excellent color or black-and-white UHF. Range up to 125 miles. Two vertically-angled narrow-width conductors are sealed according to log-periodic formula. Frequency-independent horizontal and vertical beam patterns for sharp directivity and 16-17 dB gain. High front-to-back ratio helps prevent ghosts. Gold-alodized to fight corrosion. Crossarm, 45". 300 ohms. Foam-type lead-in recommended. Less mast.
11 A 1179 W. Wt., 6 lbs. 19.88

B **MODEL LPV-ZU10 SINGLE BAY "ZIG-A-LOG:"** Log-periodic single-bay antenna for high-contrast color or black-and-white UHF reception up to 75 miles. Gain: 13.5 to 14 dB. Gold-Alodized aluminum. Preassembled. 300 ohms. Less mast.
11 A 1180 XW. Wt., 4 lbs. 9.38

BLONDER-TONGUE UHF ANTENNA AND STACKING HARNESS

C **GOLDEN DART UHF ANTENNA.** Delivers uniform peak performance on UHF channels 14 through 83. Features advanced periodic design principle for excellent color or black-and-white reception. Element arrangement provides a narrow forward beam for sharpest directivity, to cut ghosts, snow and other annoying interference. Eleven elements deliver uniform 10 dB gain. Welded steel construction. Gold-iridite finish fights corrosion. 300 ohms. Foam-type lead-in recommended. Less mast; with U-bolts.
11 A 1494 XW. Wt., 2 lbs. 4.69

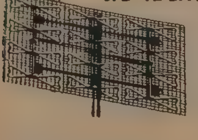
D **2-DART STACKING HARNESS.** Stacks two Blonder-Tongue Golden Dart UHF antennas, for extra 3 dB gain. Order two antennas separately (above.).
11 A 1497 XW. Wt., 1 lb. . . . . 93¢

FINCO COLOR SPECTRUM ANTENNAS

E **MODEL CS-U3 22-ELEMENT UHF ANTENNA.** For excellent color or black-and-white UHF reception in very weak signal areas. Ten driven UHF elements, 12 parasitic elements. Frequency Dependent design features increased spacing between elements toward the high end of the UHF band for highest gain and flat response on each UHF channel. High front-to-back ratio for sharp directivity. One-piece drive line, positive element spacing. Boom length, 69¾"; turning radius, 40". Less mast.
11 A 1778 XW. Wt., 4 lbs. 13.56

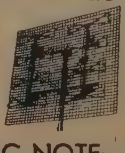
F **MODEL CS-U2 11-ELEMENT UHF ANTENNA.** For fine performance in weak signal areas. Has 10 driven UHF elements, one parasitic element, with Frequency Dependent design for highest gain. Boom, 38¼"; turning radius, 34½". Less mast.
11 A 1779 XW. Wt., 2½ lbs. 9.23

JFD 12-BAY BOW-TIE UHF ANTENNA



MODEL UHF 212. For deep-fringe areas. Super-sensitive "cardioid" dipole design for very high gain, averaging 15 dB. For color or black-and-white, up to 125 miles, with sharp directivity. Wire grid for high signal-to-noise ratio. Preassembled. 300 ohms. Foam lead-in recommended. Less mast.
11 A 2551 ZW. Wt., 15 lbs. 22.14

JFD 8-BAY BOW-TIE ANTENNA



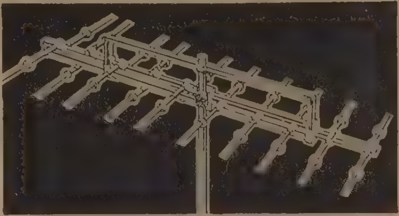
MODEL UHF 208. For outstanding UHF reception in fringe areas, with range up to 100 miles. Galvanized steel reflector, solid aluminum bows. For color or black-and-white with 12 dB average gain over channels 14-83. Preassembled. 300 ohms. Foam-type lead-in recommended. Less mast.
11 A 2550 ZW. Wt., 8 lbs. 13.14

SHIPPING NOTE: Items with suffix U, W or Z in stock no. are sent truck or express. See Ordering Information pages.

Improve FM Reception with an Outdoor Antenna

JFD DIRECTIONAL LOG-PERIODIC ANTENNAS FOR STEREO FM

Log-periodic antennas help pull in strong signals that are important for best stereo-FM channel separation and fade-free performance. Get clear full-strength reception of more stations, thanks to wideband response and uniform high gain across the FM broadcast band. Up to 41% higher gain than yagis with comparable number of elements. Full-wave L-dipoles have higher front-to-back ratio for horizontal beam 10° to 25° narrower than yagis, providing extra-sharp directivity. Eliminate or reduce "ghost" signals to bring you undistorted stereo reception. Have boom supports for rigidity even in 100-mph winds (not required on Model LPL-FM-4A). Gold anodized aluminum resists corrosion. Reinforced elements. 300 ohms impedance. Less lead-in.



Stock No.	Model	Elements	Range Up to	Wt., Lbs.	EACH
11 A 1186 ZW	LPL-FM-10A	10	175 miles	10	31.47
11 A 1192 ZW	LPL-FM-8A	8	150 miles	8	25.52
11 A 1188 ZW	LPL-FM-6A	6	125 miles	6	18.87
11 A 1145 UW	LPL-FM-4A	4	75 miles	5	12.57

Low as

12^{57}

- Full-Strength FM Reception
- Wide-Band Response
- Reduces "Ghost" Signals
- Weather-Resistant Finish

FINCO HIGH-PERFORMANCE STEREO-FM ANTENNAS

15^{57}

22^{77}

Complete **8^{37}**

6-ELEMENT DIRECTIONAL

MODEL FM-4G. Receive FM stations up to 125 miles away with this gold-corodized 6-element antenna. Twin-driven double-wall aluminum elements, with impedance control "T" match stubs, offer high gain across full 88-108 MHz band. "Geomatic" design for high front-to-back ratio—stronger signals, sharper directivity. Strong, square aluminum boom is 7-ft., 9-in. long. "Lock-Tite-No-Tilt" mounting and "box girder" snap-out brackets, ready for quick installation. Requires mast and 300-ohm lead.
11 A 2503 ZW. Wt., 6½ lbs.....15.57

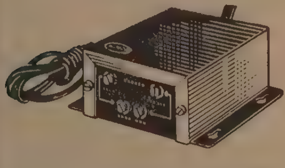
10-ELEMENT DIRECTIONAL

MODEL FM-5. Superb 10-element antenna for peak FM reception up to 175 miles. "Geomatic" design—twin-driven elements and precisely-spaced directors for highest gain. Gold-corodized finish is weather resistant. Rigid 10-ft. long square boom has suspension-type bracing. All elements are sleeve-reinforced; lock into open position in "snap-lock" brackets. Self-aligning brackets and double-wall aluminum elements are preassembled for easy installation. Requires mast and 300-ohm twin lead.
11 A 1329 ZW. Wt., 8½ lbs.....22.77

ALL-DIRECTIONAL ANTENNA

MODEL FMT-A. Preassembled "turnstile" antenna does not require rotation or aiming to receive stations from all directions. Two elements accurately matched with special quarter-wave phasing stub for optimum gain and all-directional pick-up pattern. Provides good reception over entire FM band. Gold corodized for complete weather protection. Kit includes: antenna, 50 ft. 300-ohm lead-in, mast, stand-off, insulator, 3 screw-in insulators, bracket for mounting to your present TV mast.
11 A 1330 ZW. Wt., 3¼ lbs......8.37

FINCO ACCESSORIES FOR BETTER FM RECEPTION



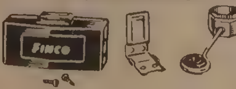
INDOOR FM SIGNAL AMPLIFIERS FOR DEEP & MEDIUM FRINGE AREAS

16^{65}

- Behind-Set Mounting
- 20 dB Nominal Gain
- Passive Filter Input

MODEL 65-7. High-gain, low-noise transis- orized amplifier has a passive filter input circuit that rejects interfering signals outside the FM band. Improves reception of weak FM signals in deep or medium fringe areas, even where strong local signals are present. Also eliminates common overload characteristics. Isolation transformer eliminates shock hazard. 300-ohm input with output for one or two FM receivers. 117 VAC. 1¾x4x4½". Wt., 1½ lbs.
11 A 1225 ....16.65

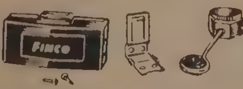
FM INTERFERENCE FILTER



4^{38}

MODEL 3007. Blocks all signals except 88-108 MHz band. Eliminates or reduces TV, CB, Ham and other frequencies to improve FM signal reception. Easily mounted at antenna terminals or receiver. Complete with universal mount and standoff insulator. Size, 1½x4½x2". Shpg. wt., 5 oz.
11 A 1167 ....4.38

TV-FM ANTENNA SPLITTER

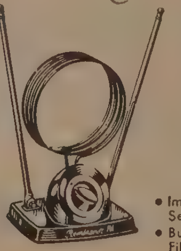


4^{10}

MODEL 3005. For TV-FM reception from one broad-band antenna. Triple-tuned bandpass filter separates signals—sends FM to radio and TV signals to TV set. Loss of only 1 dB. Easy to install. Complete with universal mount and standoff insulator. Size, 4¼x1¾x1$\frac{3}{16}$". Shpg. wt., 4 oz.
11 A 1665.............................4.10

Rembrandt

"STEREO KING" INDOOR FM ANTENNA

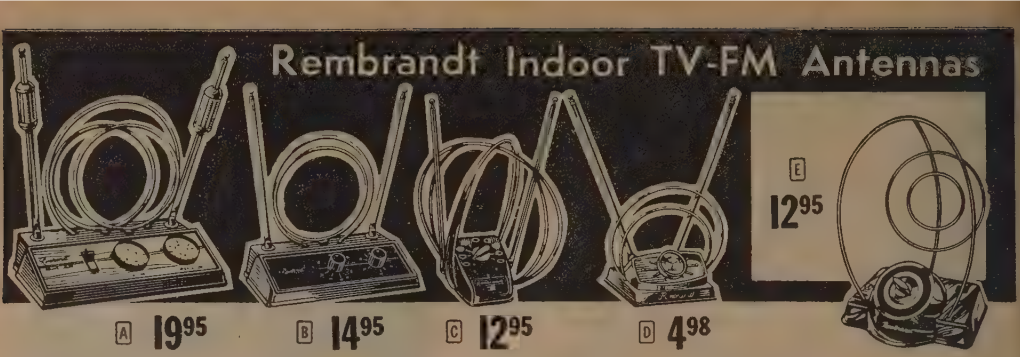


6^{95}

- Improves Stereo Separation
- Built-In Noise Filter

Model 1000. Indoor antenna pulls in more FM stations, improves signal quality on present stations. Ideal for stereo-FM. Four-section dipoles with induction coil an 12-position element selector for best possible reception. Includes noise filter for clear, pleasant FM listening. Walnut-finish base. Wt., 2½ lbs.
11 A 1385.....................6.95

Rembrandt Indoor TV-FM Antennas



(A) "COLOR-CHAMPION" UHF-VHF

- For VHF and UHF Channels 2-83
- For Black-White and Color, FM Stereo
- 12-position Picture Correction Control

This Rembrandt indoor UHF-VHF antenna challenges roof antenna performance for reception and clarity. Separate UHF-VHF isolation network filters out picture-interfering feedback for consistent true-to-life color and sharper color register. For all channels UHF-VHF 2 through 83.

Specially engineered 12-position picture correction control with silver-plated contacts and color transmission line eliminate color fading caused by the relative movement of separate UHF-VHF leads. Clear reception up to 30 miles, also fine for stereo FM, too.

The combined action of the special color tuning loops and "power booster" make it possible to get better reception with less arm adjustment. Tunes out ghosts, snow and distortion even in many fringe areas. New decorator styling will complement the decor of any room. Shpg. wt., 4 lbs.
11 A 1775 XW.......................19.95

(B) "COLOR-TUNER" ANTENNA

Decorator-styled antenna has advanced color-circuit which makes it possible to get the clear distortion-free TV picture you have always wanted. Just turn orientation knob instead of whole antenna to get superb color and black-and-white. 12-position switch. Built-in isolation network delivers superior rejection of interference. For all channels, UHF and VHF, 2-through-83. For FM stereo also. Shpg. wt., 3 lbs.
11 A 1776 XW.......................14.95

(C) "COLOR-KING" UHF-VHF

Combined action of special color phasing loops and color filter control remove picture impurities for consistent true-to-life reception. 12-position picture correction control to clear up ghosts and snow. Separate low-loss UHF-VHF leads with matched impedance. Walnut finished base.
11 A 1722 XW. Shpg. wt., 3½ lbs...12.95

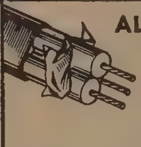
"DELUXE" UHF-VHF ANTENNA. Gives you clearer, sharper color, black-white. Channels 2-83. Dual control 12-position switch.
11 A 1371 XW. Shpg. wt., 3 lbs......9.95

(D) ECONOMICAL "POWER-KING"

Performance and economy combined. The dual action of unique rings and long telescoping arms bring in clearer, sharper pictures. For all channels UHF-VHF 2-83, color and black-and-white, stereo FM. Twelve-position direction control helps clear up ghosts and snow even in difficult areas. Finer quality materials, superior design and construction assure better reception and longer life. Shpg. wt., 2½ lbs.
11 A 1777 XW.......................4.98

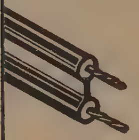
(E) TV "COLOR-COMPUTER"

A flick of a dial gives you instant picture improvement and effectively matches your roof antenna to your TV set under all weather conditions. Operates equally well on UHF and VHF channels. Strengthens and regulates your picture's color, contrast, and brightness. Helps to eliminate ghosts and shadows. You connect it yourself in minutes, just place the computer on top of your TV set, attach roof antenna lead to computer and computer lead to TV set.
11 A 1750. Shpg. wt., 4 lbs..........12.95



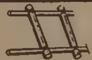
ALLIED UHF-VHF MYLAR SHIELDED CABLE

300-ohm twin line for color, black-and-white. Low line loss for strong, clear pictures. Shielding cuts possibility of picking up unwanted interference. No. 20 stranded copper wire. Shpg. wt., 7 lbs. per 100 ft.
11 A 1189. 50-ft. Coil.......................4.89
11 A 1200 XW. 100-ft. Coil.................8.95
11 A 1201 XW. 250-ft. Coil...............21.95



300-OHM UHF-VHF FOAM TUBULAR CABLE

UHF-VHF 300-ohm foam-tubular twin line cable is ideal for color. Moisture resistant black polyethylene tubing; copper stranded conductors. Shpg. wt., 2¼ lbs. per 100 ft.
11 A 1656. 50-ft. Coil.......................1.98
11 A 1657. 100-ft. Coil.....................3.79
11 A 1658 XW. 250-ft. Coil.................9.49

F

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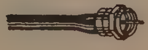
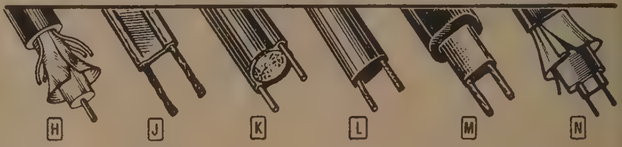


(F) UHF-VHF 300-OHM OPEN LINE. Loss, 0.5 dB per 100 ft. at 200 MHz. Shpg. wt., 100 ft., 2¼ lbs. 250 ft., 3½ lbs. Minimum, 100 ft. coil.
11 A 1473. 100 ft.-Coil.......................3.29
11 A 1474 XW. 250 ft.-Coil...................7.89

(G) RG-59/U TV COAXIAL CABLE. 75-ohm. Mylar shielded. Connector each end. Wt., 3 lbs.
11 A 1659. 50-ft. Coil.......................4.49
11 A 1660 XW. 100-ft. Coil.................8.95
11 A 1661 XW. 250-ft. Coil...............15.95

BELDEN TWIN LINE AND COAXIAL CABLE



TWIN-LINE

(H) TYPE 8228. New Duofoil® 75-ohm 82 channel coax cable for improved color. Four spiralling drain wires provide equal distribution of stresses. 100% shielded. Moisture resistant. .242" O.D.
11 A 1751. 100-ft. Coil. 3½ lbs....6.17

(J) TYPE 8230. Weldohm design for increased strength and conductivity, 7x28 stranded, copper-coated steel wire. Almost twice as strong as plain copper. Perfect for long lead-ins. 70-mil web. 300 ohms. 2 lbs. per 100'.
11 A 1445. 50-ft. Coil...............1.34
11 A 1447. 100-ft. Coil.............2.22
11 A 1553 XW. 250-ft. Coil.........5.50

TYPE 8225. (Not illus.) For TV and FM antennas. 7x28 stranded copper conductors. Flat polyethylene jacket, 58-mil web thickness. 300 ohms. Outdoor use. Wt. per 100 ft., 1¾ lbs.
11 A 1441. 50-ft. Coil...............1.20
11 A 1443. 100-ft. Coil.............1.97
11 A 1531 XW. 250-ft. Coil.........4.85

(K) TYPE 8275. UHF-VHF type. High-quality, low-loss lead-in for all TV and FM installations. Ideal for color TV. Cellular polyethylene core is filled with inert gas. Polyethylene jacket. 7x28 copper-coated steel conductors. 300 ohms. 3½ lbs. per 100 ft.
11 A 1448. 50-ft. Coil...............2.70
11 A 1450. 100-ft. Coil.............4.65
11 A 1536 XW. 250-ft. Coil.......11.05

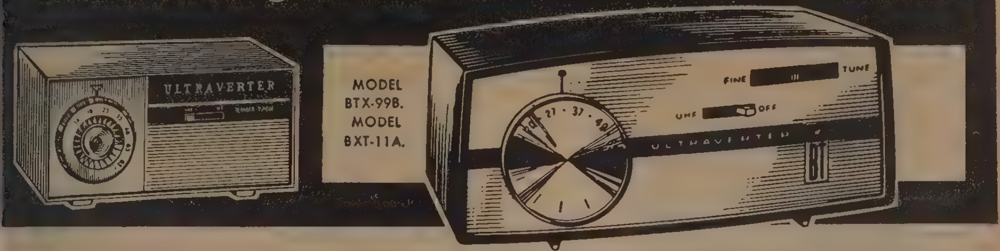
TWIN-LINE (Cont'd)

(L) TYPE 8235. 300-ohm oval twin line. Low-loss type for both UHF and VHF use. Copper-coated, 7x26 steel wire conductors. 185-mil web thickness. Resists extreme weather conditions. Jacket of 100% polyethylene. Supplied in 100-ft. coils only. Shpg. wt. per 100 ft., 4½ lbs.
11 A 1451. 100-ft. Coil.............5.35

(M) TYPE 8285. Low-loss 300-ohm UHF-VHF. Recommended for color TV. Provides unchanging electrical and physical characteristics. Durable, for any application. 22-gauge (7x30) copper-weld conductors. Polyethylene insulation and webbing. Cellular polyethylene jacket. Outside diameter, ¼x1⁵⁄₃₂". Shpg. wt., 3½ lbs. per 100 ft.
11 A 1452. 50-ft. Coil...............2.85
11 A 1454. 100-ft. Coil.............4.90
11 A 1539 XW. 250-ft. Coil.......11.65

(N) TYPE 8290. Shielded ultra-low-loss lead-in is ideal for color. Mylar shielding cuts interference from ignition and other annoying electrical gear and appliances. May be run through conduit or run adjacent to metal. Extra-durable construction. 300 ohms. Shpg. wt., 3 lbs. per 100 feet.
11 A 1603. 50-ft. Coil...............5.95
11 A 1605. 100-ft. Coil...........10.15
11 A 1655 XW. 500-ft. Coil.......47.90

Blonder-Tongue UHF Converters and Antennas



MODEL BTX-99B.
MODEL BXT-11A.

IT'S EASY AND INEXPENSIVE TO ADD UHF WITH BLONDER-TONGUE CONVERTERS

New TV stations going on the air will be on UHF channels 14-83. You can easily equip your VHF set to tune them . . just mount a UHF antenna (usually on your present mast), and plug-in a UHF converter. For color and black-and-white.

LOW-PRICED BATTERY POWERED SOLID-STATE UHF CONVERTER

13.45
- Connects in Minutes
- Range Up to 20 miles
- 70-channel UHF

MODEL BTD-44. An amazing low price or this solid-state UHF converter. Adds 70-channel UHF tuning to VHF set, dials just like a radio. Gives sharp undistorted pictures within a 20-mile range. Patented tuner and exclusive unnel diode circuit spell highest reliability, finest performance.

Highly selective, tuner RF stage minimizes multiple tuning problems, allowing no drift or distortion. Performance s excellent on all channels from 14 to 83. Provides excellent reception even in fringe areas.

UHF wire-loop antenna. Patented stripless, stainless steel terminals are used at all 300-ohm inputs and outputs. In handsome walnut case. Size, 3x6⅜x3¾".

11 A 1324. Shpg. wt., 3 lbs. 13.45
18 A 5779. "D" Batteries. 14 oz. 2/.33

OUR LOWEST-PRICED AC UHF CONVERTER

19.85
- Channels 14-to-83
- Illuminated Dial
- Precise Vernier Tuning

MODEL BTX-99B. Economy and good-performance are only two of the features you get in this one-transistor UHF converter. Provides excellent reception in color and black-and-white TV—often with only an indoor antenna. Gives drift-free performance and low-noise figure which means a clearer picture.

No matter what channel you tune performance is excellent on all channels from 14 to 83. Vernier tuning and illuminated dial make it possible to pinpoint any channel easily and rapidly. Eliminates ghosts, snow and distortion by tuning in even weak signals.

Stainless steel, rustproof terminals are used at all 300-ohm inputs and outputs. Wire-loop antenna. Size, 3x6⅜x3¾". 110-120 V, 60 Hz AC. U.L. Listed. Shpg. wt., 3 lbs.

11 A 1395 . . . . 19.85

"DELUXE" TWO-TRANSISTOR UHF CONVERTER-BOOSTER

29.95
- Calibrated Dual-Speed Vernier Dial
- Powerful Low-Noise Amplifier

MODEL BXT-11A. Solid-state converter lets you tune all 70 UHF channels, with booster amplifier for good reception even in fringe areas. Two transistor circuit has high signal-to-noise ratio for sharp, clear pictures and static-free sound. Provides excellent color as well as black-and-white. Calibrated dual speed vernier dial with 100: 1 ratio to zero-in on any channel.

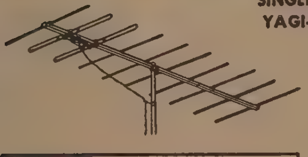
Double tuned UHF input circuits and shielded oscillators insure interference-free reception. TV performance is uniformly good on each and every channel from 4-to-83—even on higher channels where other converters perform poorly. Powerful low-noise amplifier removes snow and ghosts for consistant true-to-life viewing.

Balanced 300-ohm input and output. Stripless screw terminals, pilot light. Includes wire-loop antenna. Installs in minutes using only a screwdriver. Size, 3x6⅜x3¾". U.L. Listed. For 110-120 V, 60 Hz AC. Shpg. wt., 3 lbs.

11 A 1394 . . . . 29.95

Finco Single-Channel Yagi and Trailer Antenna

SINGLE-CHANNEL SENSITIVE "GEOMATIC" YAGI-TYPE VHF TELEVISION ANTENNAS



High-quality yagi-antennas for color or black-and-white reception in fringe areas. Provide maximum gain, sharp directivity, flat response and high front-to-back ratio. Gold-corodized aluminum fights corrosion. Single-channel or broad-band models for high (7-13) or low (2-6) channels.

YOUR CHOICE OF CHANNELS

GOLD CORODIZED SINGLE-CHANNEL Y10 SERIES

For reception up to 125 miles. Ten elements. Av. shpg. wt., 4½ lbs.

Stock No.	Model	Channel	EACH	Stock No.	Model	Channel	EACH
11 A 2236 XW	Y10-2	2	15.90	11 A 1384 XW	Y10-8	8	5.55
11 A 2237 XW	Y10-3	3	15.57	11 A 1387 XW	Y10-9	9	5.55
11 A 2238 XW	Y10-4	4	14.70	11 A 1388 XW	Y10-10	10	5.55
11 A 2240 XW	Y10-5	5	14.10	11 A 1389 XW	Y10-11	11	5.55
11 A 2241 XW	Y10-6	6	13.50	11 A 1390 XW	Y10-12	12	5.55
11 A 1380 XW	Y10-7	7	5.55	11 A 1393 XW	Y10-13	13	5.55

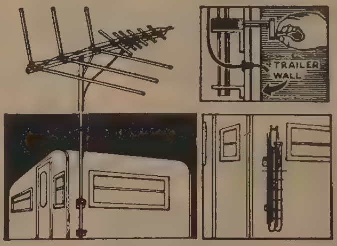
GOLD CORODIZED YAGI BROADBAND ANTENNAS

Miles	Stock No.	Model	Channels	Boom	Elements	Lbs.	EACH
To 125	11 A 2559 XW	Y10-713	7-13	83"	10	4½	7.50
To 125	11 A 1710 XW	L-26	2 6	118"	6	3	16.77

STACKING KITS

Stock No.	Type	Application	Lbs.	EACH
11 A 2086 XW	GA	For stacking 2 same chan. High Band (7-13) or 2 Y10-713 antennas	1	1.50
11 A 2075 XW	GB	For stacking 2 same chan. Low Band (2-6) antennas	1	1.56
11 A 1711 XW	GC	For stacking 2 L-26 antennas	6	2.10

TRAILER ANTENNA



UP . . . a far-reaching broadband antenna

DOWN . . . locks out of the way

39.95
- For 82-Channel VHF/UHF
- Rotates From In Trailer
- Folds Down for Travel

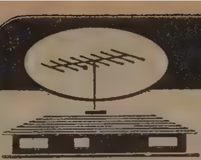
MODEL TTR-1. All-channel Color Spectrum antenna manually rotates 360° from inside trailer for superb color and black-and-white TV. Goes up in seconds, telescopes and folds down for travel. 9-element, gold-corodized. Easily mounted with single lead-in and splitter. Shpg. wt., 8 lbs.

11 A 1073 XW 39.95

MODEL TTW-1. Same, but without rotator feature. Wall mounting. 6½ lbs.

11 A 1074 XW 18.95

Antenna Rotators for Ultra-Clear TV



Proper antenna direction is essential for better all-around reception—especially color TV. Precise directional control gives you the best signal from every station for the clearest picture, in all reception areas. Improves stereo FM, too.

Color comes alive with an antenna rotator. Color signals are complex. A perfectly aimed color antenna is the only way to get true-to-life color pictures, free from distortion or unnatural color.

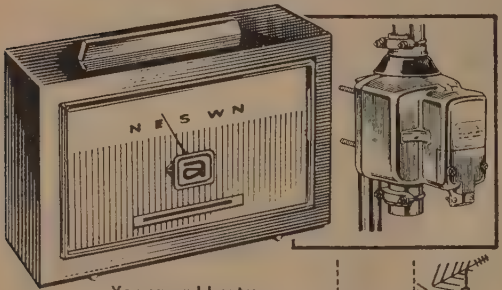
Better color pictures in fringe areas. If you live in an area where reception is poor, you'll be amazed at the difference a rotator can make. Locks in distant stations for maximum signal strength.

Pin-point every TV station for sharper color. Many times a reception area is surrounded by stations. A rotator system pinpoints each one. Pushing a button, or flicking a switch will do it.

Antenna/rotator system for natural color. If your color picture has ghosts, distortion or smearing; if it doesn't give the type of pictures you think it should, a rotator can be the answer for you.

alliance Rotators for Clearer "All Around" TV Reception

MANUAL ANTENNA ROTATOR SYSTEM



You can add extra control units for more than one TV

23.98 Our lowest-priced, big value manual antenna rotator system

Model T-45. Our lowest priced rotator. Just touch the control bar on control unit, and antenna rotates at one rpm until you release bar—pointer shows direction. You can add extra control units if you have more than one TV set—control antenna from each set. Rotator is unaffected by motor current, cable length or line voltage. Rotates clockwise or counter-clockwise. Order 5-conductor cable below. Control unit, 4½x6½x2½". 110-120 VAC. U.L. Listed.

11 A 1555 XW. Shpg. wt., 10 lbs. 23.98

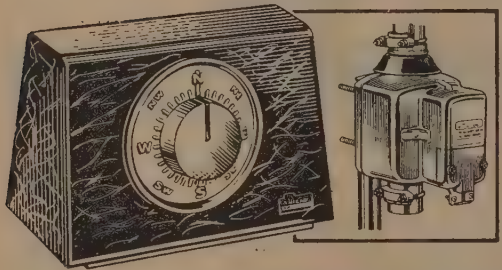
11 A 1690 XW. Extra Control Unit. Shpg. wt., 4 lbs. ...... Each 13.95

ANTENNA THRUST-BEARING BRACKET

Model TBB2. Eliminates possibility of damage to rotator systems. Designed for use with heavier-type antennas. Minimizes strain on rotator by relieving it of antenna's weight. Protects gears against lateral strain. For masts to 1⅜" diameter.

11 A 1246 XW. Shpg. wt., 3 lbs. 2.91

ECONOMICAL AUTOMATIC ANTENNA ROTATOR SYSTEM

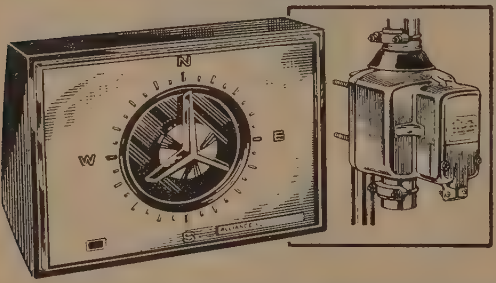


28.78 Automatically positions antenna for reception of strongest possible signals

Model U-100. This heavy-duty unit provides positive instant control of antenna rotation. Simply turn pointer on control unit's compass dial, and antenna automatically turns itself to the direction you have chosen, then stops. Permits positioning antenna for reception of strongest possible signals, and reduces interference. Rotates 360° in just 60 seconds, with instantly reversible motor operating at a speed of one rpm. Magnetic brake and positive mechanical stop at end of rotation prevent over-travel. Factory-lubricated and moisture-sealed. External hardware is corrosion-protected. Control unit is mahogany plastic. 7x4½x4". For 110-120 volts, 50-60 Hz. Order 4-conductor cable at bottom of page.

11 A 2442 XW. Shpg. wt., 10 lbs. 28.78

SOLID-STATE AUTOMATIC ROTATOR SYSTEM



35.97 Transistorized control unit provides extra precision important for color TV

Model C-225. *Transistorized* control unit assures positive, stepless synchronous antenna control throughout the full 360° rotation. Just set the dial—automatically aims your antenna to direction indicated. Completely silent. Accurately zeros-in on desired stations. Has patented phase-sensing electronic bridge circuit for movie-clear pictures without interference. Thermostatically protected primary circuit. Magnetic brake and sensing circuit eliminate over-travel. Positive mechanical stop at end of rotation. Instantly reversible motor rotates at a speed of one rpm. External hardware is made of corrosion-protected materials. Plastic control unit is 5x6½x4¼". 110-120 VAC. U.L. Listed. Order 5-conductor cable at bottom of page.

11 A 1512 XW. Shpg. wt., 9½ lbs. 35.97

FOUR-AND FIVE-CONDUCTOR ROTATOR CABLE

FOUR-CONDUCTOR CABLE. For use with Alliance U-100 rotator system above; Cornell-Dubilier AR-22R and AR-10B and RCA 10W505 rotator systems on facing page. Shpg. wt., per 100-ft., 3 lbs.

11 A 1237. 100-Ft. Coil 2.99

11 A 1241. 250-Ft. Coil 7.29

FIVE-CONDUCTOR CABLE. For use with Alliance C-225 and T-45 rotator systems above; Cornell-Dubilier AR-33 and RCA 10W707 on facing page. Shpg. wt., per 100-ft., 3 lbs.

11 A 1513. 100-Ft. Coil 3.89

11 A 1515. 250-Ft. Coil 9.95

Rotators for Best Color and Black-and-White TV

CDE Automatic Rotators for All Reception Areas

ADVANCED ROTATOR LETS YOU SIMPLY PUSH BUTTONS FOR 5 SPECIFIC STATIONS

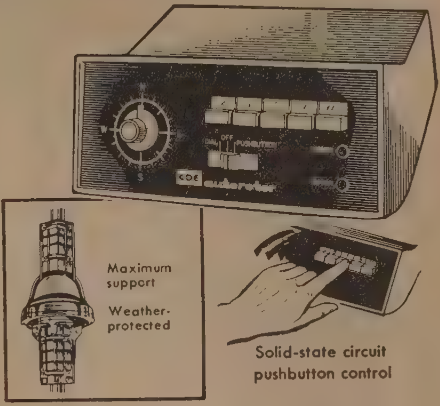
49.95 Automatically positions antenna for reception of strongest possible signals

odel AR-33. Fully automatic rotator system for perfect antenna control ith the push of a button. Each of the five pushbuttons can be set for a ecific TV station. When you switch channels, just press the button for esired channel—antenna rotates automatically to the preset direction r finest possible picture. Pin-point directivity for true-to-life color, arper black and white. Compass dial allows manual control, too.

ll solid-state circuit gives positive stepless operation. Rugged silicon ansistors for reliable performance. Heavy duty relay contacts. Thermal-y-protected transformers. Completely silent—accurately positions an-enna within ±1% for precise directivity.

eavy-duty Bell Housing Rotator has rugged in-line design and ball hrust bearings for maximum antenna support. Weather-protected, with igh-torque motor and low-temperature operation. Cannot be blown off-tation when control is energized. Contemporary-styled control unit. For asts 7/8″ to 2 1/16″ dia. Requires five-conductor cable on opposite page. L. Listed. For 110-120 VAC. Shpg. wt., 15 lbs.

A 1745 XW 49.95



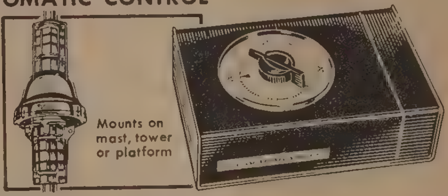
Solid-state circuit pushbutton control

ROTATOR SYSTEM WITH AUTOMATIC CONTROL

34.95 Easy dial setting for precise rotation . . Turns a full 360° in just 45 seconds

odel AR-22R. Simple dial setting automatically positions antenna in 6° ncrements for precision tuning. Set control for desired direction, then otator takes over and turns antenna accurately to desired point. Mag-etic brake prevents over-travel. Reset switch in control base. Precision all bearings and gears in die-cast, reinforced "Bell" housing. Reversible lamps for masts 7/8″ to 2 1/16″ O.D. With 3 guy lugs. Viny-covered control nit. Order 4-conductor cable on opposite page. 110-120 VAC.

1 A 1396 XW. Shpg. wt., 15 lbs. 34.95



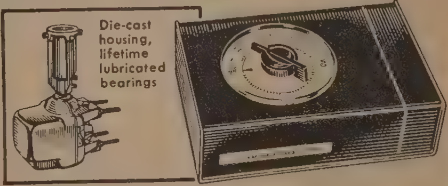
Mounts on mast, tower or platform

BUDGET-PRICED AUTOMATIC ANTENNA ROTATOR

28.95 Automatic control for in-line antennas, plus secure, direct mounting of large arrays

Model AR 10B. Turn knob to direction desired, rotator turns antenna quickly and accurately for the finest possible picture. Built-in stub mast and die-cast adapter provides secure, direct mounting of large arrays. Mechanical brake prevents over-travel. High-torque motor. Die-cast zinc housing, life-time lubricated bronze bearings. Not for stacked antennas. Requires four-conductor cable listed on opposite page. Control unit is vinyl covered. For 110-120 VAC.

11 A 1744. XW. Shpg. wt., 10 lbs. 28.95



Die-cast housing, lifetime lubricated bearings

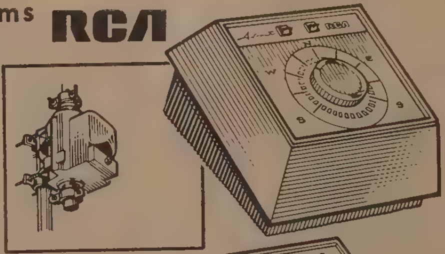
Newly Designed Antenna Rotator Systems RCA

MANUAL ROTATOR FOR QUALITY RECEPTION

29.95 Eliminates ghosts, distortion and smearing . . Has corrosion resistant materials throughout drive unit

Model 10W505. Whether aligning for distant stations or stations in different directions, the dynamic turning power of this rotator assures pin-point accuracy. Positive braking action locks the antenna in the correct position and prevents it from windmilling. Main drive gear is integrally cast with a high strength shaft mounted on stainless steel bearings. Heavy-duty rugged clamps prevent mast slippage in bad weather. Handsome beige control unit, 6⅜x7x3¾″. 110-120 VAC.

11 A 1564 XW. Shpg. wt., 10 lbs. 29.95

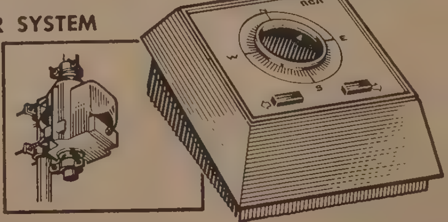


SOLID-STATE FULLY AUTOMATIC ROTATOR SYSTEM

39.95 Just set dial to direction, rotator turns . . High strength, light-weight aluminum housing

Model 10W707. This transistorized and fully automatic rotator system is designed to assure maximum reception from your outdoor antenna. Has pre-turning momentum that develops the torque necessary to handle icing, wind, or unusual stress and heavy loads. The largest TV antenna and Amateur arrays can be turned and accurately positioned for pin-point reception. Heavy-duty rugged clamps prevent mast slippage. Elegantly-styled completely silent control unit, 6⅜x7x3¾″. For 115 VAC.

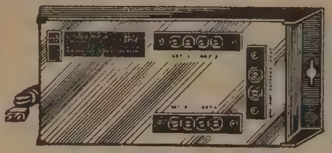
11 A 1005 XW. Shpg. wt., 14 lbs. 39.95



SHIPPING NOTE: Items with suffix U, W or Z in Stock No. are sent truck or express. See Ordering Information pages.

Blonder-Tongue Antenna Amplifiers

INDOOR DISTRIBUTION AMPLIFIERS



All-Channel

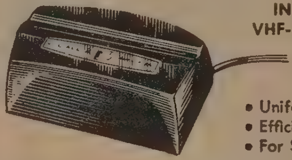
41^{42}

4-SET DISTRIBUTION VHF-UHF-FM AMPLIFIER

MODEL 4572. Use up to four sets with a single antenna, both UHF and VHF plus FM. Reliable solid-state circuit gives maximum signal-to-noise ratio for snow-free pictures, both color and black-and-white. Will not overload in strong signal areas, up to 0.2 volt. Flat response, high gain, excellent output isolation. Has 3 silicon transistors. Self-contained power supply. Single 300-ohm input, 4 combined UHF/VHF outputs. For TV channels 2 to 83 plus FM. Stripless screw terminals. 8¼x3¼x1⅞". For 110-120 volts, 60 Hz AC. 2 lbs.
11 A 1734..41.42

VHF/FM 4-SET DISTRIBUTION AMPLIFIER

MODEL 4571. Same as 4572, but with two transistors for VHF television channels 2-13 and FM band only. 300-ohm. 8¼x3¼x1⅞". For 110-120 volts, 60 Hz AC. Shpg. wt., 2 lbs.
11 A 1735..16.75



INDOOR TWO-SET VHF-UHF-FM AMPLIFIER

26^{85}

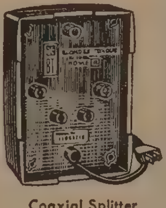
- Uniform High Gain
- Efficient FM Filter
- For Single Down-Leads

MODEL 1238. Provides high gain for bright color and sharp, steady black-and-white pictures without snow or interference. Can be used with a single receiver, or two receivers. For use with all-channel sets or VHF sets with UHF converters.

Obsolescence-proof—covers all TV channels 2 through 83—present as well as future channels. Circuit uses two high-stability silicon transistors for the utmost reliability and cool operation. Draws so little power that the unit need never be turned off. Built-in FM filter prevents overload.

Designed for use with single down-lead antennas. Input accepts combined UHF/VHF signals of 300-ohm impedance. Output is two combined signals at 300 ohms. Easily installed, for indoor mounting. Compact size, 2⅞x4x1⅝". For 110-120 volts, 60 Hz AC. Shpg. wt., 1 lb.
11 A 1342..26.85

VHF/FM COAXIAL DISTRIBUTION AMPLIFIER



Coaxial Splitter for Up to 4 Sets—Ideal for MATV

17^{90}

- Four 75-Ohm Outputs
- Channels 2-13 and FM

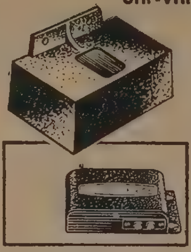
MODEL 4569. Solid-state model feeds signal for up to 4 sets from single 75-ohm coax download. Insures top-quality reception in any area. Powerful low-noise silicon transistor circuit gives snow-free pictures, provides 5 dB typical gain at each output. High output isolation (14 dB typical). For channels 2-13 plus FM band. 75-ohm input and outputs. With five solderless connectors for coax cable. Mounts anywhere indoors. 4⅛x1⅞x1⅞". For 115 volts, 60 Hz AC. Shpg. wt., ¾ lb.
11 A 1736.............................17.90

VHF/FM 300-OHM 4-SET DISTRIBUTION AMPLIFIER

MODEL 1436. Four-output unit for channels 2-13 and FM. Powerful, low-noise silicon transistor. High output isolation. 300-ohm balanced input and outputs. Stripless screw terminals. 3x4⅛x1⅝". For 115 V, 60 Hz AC. Wt., 1 lb.
11 A 1737..13.40

MAST-MOUNTING AMPLIFIERS

UHF-VHF-FM ANTENNA AMPLIFIER



Mast-Mount Amplifier with Indoor Remote Power Supply

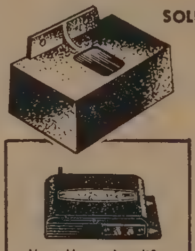
32^{37}

- Weatherproof
- Low Power Drain

MODEL 4565. Covers 82 TV channels, for clearer, sharper pictures. Mounts on mast for best signal-to-noise ratio. For single set. Single all-channel input for use with all-channel antenna. High-stability silicon transistors for brilliant color and black-and-white. Indoor remote power supply has separate 300-ohm UHF/VHF outputs. Filter prevents FM overload. Amplifier, 2⅞x4x1⅝"; power supply, 2⅞x4⅞x1⅜". For 110-120 VAC. 1½ lbs.
11 A 1733........................32.37

4566. As above, but separate UHF and VHF inputs, outputs.
11 A 1343........................35.25

SOLID-STATE VHF ANTENNA AMPLIFIER



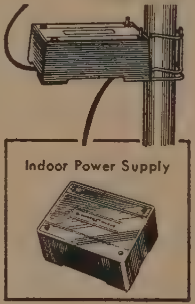
Mast-Mount Amplifier with Indoor Remote Power Supply

25^{17}

- High-Gain Circuit
- Silicon Transistors

MODEL 4567. 300 OHMS. Has two-transistor circuit for sharp color and black-and-white pictures. Pulls in weaker channels without overloading from strong local TV or FM stations. Provides 17 dB gain. Can be used with one or two TV sets. Silicon transistors provide the utmost in circuit stability and reliability. Uses little power. Amplifier mounts on mast, power supply indoors. Amplifier, 2⅞x4x1⅝"; power supply, 2⅞x4⅞x1⅜". 110-130 V, 60 Hz AC. Shpg. wt. 1½ lbs.
11 A 1344........................25.17

SOLID-STATE UHF ANTENNA AMPLIFIER



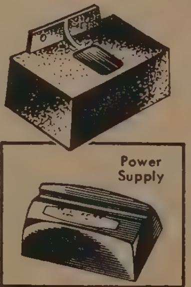
Indoor Power Supply

29^{65}

- 2 Silicon Transistors
- Triples Signal Strength

MODEL 4568. Powered for weak channels, yet does not overload strong channels. Average gain of 10 dB triples signal strength. Offers maximum signal-to-noise ratio for clear, strong pictures. Two ultra-stable silicon transistors for uniform high gain across entire UHF band. "Jiffy Mount" snaps onto antenna mast—amplifier slips over prongs for fast, secure installation. Remote power supply plugs into AC outlet. 300-ohm balanced input and output. Amplifier and power supply each 1⅝x2⅞x4". 110-120 V, 60 Hz AC. 1¼ lbs.
11 A 1508........................29.65

HIGH-GAIN VHF-TV AND FM ANTENNA AMPLIFIER



Power Supply

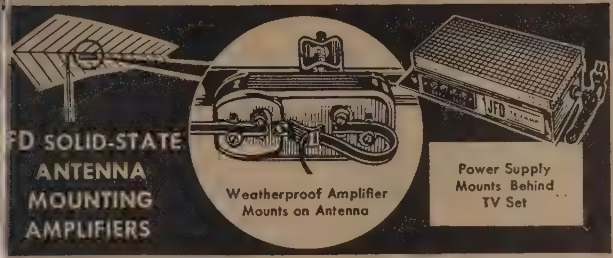
91^{15}

- For Far-Fringe Areas
- 300 or 75 Ohms

MODEL 1206. 25 dB gain on channels 2-13 and FM broadcast band. Increases signal voltage at least 18 times. Excellent for color reception. May be mast-mounted a mile away from set and AC power source (with open lead-in)—amplifies signal with no increase in line noise from lead-in. Needs no separate power line. Operation is automatic—amplifier turns on and off at RP-3 remote power supply. 300-ohm balanced input; 300 and 75-ohm outputs. Broadband circuit for high S/N ratio. Amplifier, 5x3x3"; supply, 8x3x2". 115 V, 60 Hz AC. Wt., 7 lbs.
11 A 1159........................91.15

Antenna Equipment Is Available on Credit Terms . . . See Page 438

JFD and Jerrold TV Antenna Amplifiers


FD SOLID-STATE ANTENNA MOUNTING AMPLIFIERS
Weatherproof Amplifier Mounts on Antenna
Power Supply Mounts Behind TV Set
JFD

"SNOW PLOW" MAST-MOUNT AMPLIFIERS

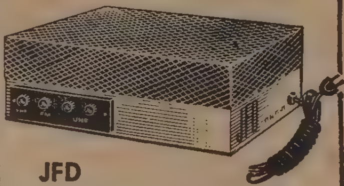
VHF/ UHF/FM 37^{50} **VHF TV** 28^{50} **UHF TV** 28^{50}

DEL SP-2382CD. Offers bright, sharp HF-VHF color or black-and-white TV; ar, brilliant FM reception. Three-sili-n-transistor "Noverload" design—15 VHF gain; 18 dB UHF gain; 12 dB M gain. 300-ohm input, two 300-ohm tputs. Weather and lightning protected amplifier unit mounts on antenna mast highest S/N ratio. No-strip terminals. mpact power supply with built-in split- mounts conveniently near TV receiver. eamplifier, 6½x2¾x3½". Power sup-; 5½x3½x¾". 110-120 V, 60 Hz AC.
A 1262. Wt., 2 lbs............37.50

MODEL SP-2300CD. VHF mast-mounted amplifier increases picture clarity on channels 2-13; reduces ghosts, snow and interference. Same fine features as SP-2382 at left. 15 dB gain. 110-120 VAC.
11 A 1743. Wt., 2 lbs............28.50

MODEL SP-2314. UHF-only mast-mounted amplifier offers full 15 dB gain on UHF channels 14-83. Improves overall performance of any UHF antenna. VHF bypass circuit reduces interference. Other features same as SP-2382. 110-120 VAC.
11 A 1263. Wt., 2 lbs............28.50

INDOOR AMPLIFIERS



JFD

DIRECTOR-82 UHF-VHF-FM

28^{50}
- Installs Anywhere
- Solid-State Circuit

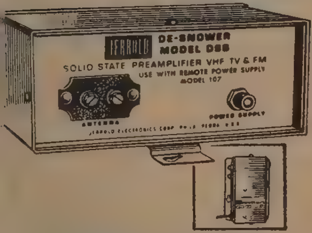
MODEL PC-4382. All-channel antenna amplifier improves reception on UHF and VHF channels 2-83. plus FM. "Noverload" silicon transistor; broadband design. 4-output splitter network; 8 dB gain per output. 300-ohm input, outputs. Size 5x3½x1¾". For 110-120 V, 60 Hz AC. Shpg. wt., 2 lbs.
11 A 1264......................28.50

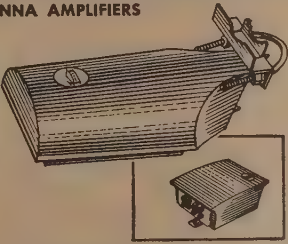
DIRECTOR-12 VHF-FM ONLY

MODEL PC-4312. Same fine features as above, but operates on VHF channels 2-13. Excellent for color TV. Mounts in any position. 110-120 V, 60 Hz AC. 2 lbs.
11 A 1266......................18.00

JERROLD TELEVISION AMPLIFIERS AND ACCESSORIES

MAST-MOUNTING ANTENNA AMPLIFIERS


JERROLD
DE-SNOWER
MODEL DSB
SOLID STATE PREAMPLIFIER VHF TV & FM
USE WITH REMOTE POWER SUPPLY MODEL 107
ANTENNA
POWER SUPPLY



"DESNOWER" HIGH-OUTPUT VHF PREAMPLIFIER

59^{70} *Can Drive Small Distribution System*

ODEL DSB-107. High-output VHF antenna preamplifier with built-in tunable FM rap. Output capability is +40 dB mV per hannel, for up to 7 channels at −46 dB ross-modulation, sufficient to drive small ntenna distribution systems. FM trap nay be tuned to 10 dB attenuation on and 1.25 MHz wide, within FM Band. If o strong interference exists, tap can be uned off FM band. Uses set-mounted ower supply, 4¾x3¼x1¼". Mast-nounted preamp unit, 2¾x6¼x4¼". 300 hms. For 110-120 V, 60 Hz AC.
1 A 2076. Shpg. wt., 2 lbs.......59.70

VHF 2-TRANSISTOR AMPLIFIER

PM-106L. As above, 300-ohm input and utputs. 16.9 dB gain. Mast-mounted reamp, 2¼x6¼x3⅜"; power supply; 4¾ 3¼x1¼". 110-120 V, 60 Hz AC. 2 lbs.
1 A 1416......................29.95

UHF 2-TRANSISTOR AMPLIFIER

PM-104L. As above, 300-ohm input and utputs. 13.7 dB gain on UHF channels 4-83. Preamp, 2¼x6¼x3⅜"; power sup-ly, 4¾x3¼x1¼". 110-120 V, 60 Hz AC.
1 A 1318. Wt., 2 lbs............24.61

"POWERMATE PLUS" VHF-UHF ANTENNA AMPLIFIER

26^{60} *Single or Dual 300-Ohm Outputs*

MODEL 4283. Functionally styled mast-mounting preamplifier features full 82-channel operation, tunable FM trap. Special lightning protection circuit eliminates danger to your TV set if lightning strikes antenna. 300-ohm antenna input with choice of single or dual 300-ohm TV set outputs. VHF gain, 13.0 dB; UHF gain, 10.0 dB. Uses remote wall or set-mounting power supply. 2¼x6x4". Preamplifier, 3½x8x3¾". With all mounting hardware, cable connectors. For 110-130 V, 60 Hz AC.
11 A 2077. Shpg. wt., 2¼ lbs.....26.60

VHF ANTENNA AMPLIFIER

MODEL SPC-107L. 75-ohm impedance, as above, for VHF only. Great for color TV. Offers gain of 16 dB. Preamp, 2¼x6¼ x3⅜. Power supply, 4¾x3¼x1¼". 2 lbs.
11 A 1502......................29.95

75-OHM CONNECTORS

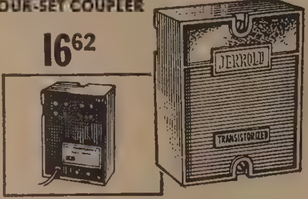
MODEL F-59A. Male RG-59/U connector for Jerrold 75-ohm equipment. 1 oz.
11 A 1742..................Each 36¢

MODEL F-56A. For Belden 8828 cable.
11 A 1272. Wt., 1 oz..........Each 36¢

INDOOR TV AMPLIFIERS

POWERMATE TV/FM FOUR-SET COUPLER

16^{62}



MODEL TA-24DP. Amplified coupler has sufficient gain (2.2 dB at low-band, 3.6 dB at high band) to supply up to 4 TV sets from single antenna. (Higher gain with less than 4 sets.) Improves VHF-TV channels, plus FM. 300-ohm input and outputs. 3¼x4½x2", mounts on any surface. 110-120 V, 60 Hz AC. 2 lbs.
11 A 1270......................16.62

MODEL TAC-4. UHF/VHF 4-way splitter/amplifier improves UHF-VHF TV reception, plus FM. Total gain, 10 dB, 3 dB for each output. 75-ohm input, outputs. 7$\frac{3}{16}$x4$\frac{3}{16}$x1⅞". Shpg. wt., 1½ lbs.
11 A 1738........30.60
11 A 1724. TAC-1. Above, Gain: VHF, 11 dB; UHF, 12 dB. Wt., 2 lbs...28.60

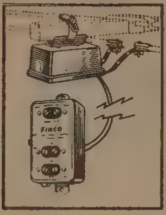
MODEL TC88. VHF amplifier. Same as above but for VHF-TV, plus FM. Silicon transistor, inverse feedback circuit. 4 outputs, 75 ohms. 7$\frac{3}{16}$x4$\frac{3}{16}$x1⅞". 2 lbs.
11 A 1739......................19.95

MODEL TA-66A. VHF amplifier. Above, but with 300 ohm input and outputs. 8$\frac{7}{16}$x4⅛x6¼". Shpg. wt., 1½ lbs.
11 A 1217......................23.28

NOTE: Antenna Amplifiers Will Improve and Boost TV Pictures or FM Only When Used With Lead-in and Antenna in GOOD Condition. Check Your Lead-in and Antenna Before Ordering.

TV Amplifiers and Installation Accessories

FINCO 82-CHANNEL SILICON TRANSISTOR AMPLIFIERS



M-22 300-OHM ANTENNA AMPLIFIER

Silicon transistor amplifier provides 15dB gain. For VHF-UHF. Amplifier unit, in die-cast housing, mounts on antenna boom with stainless steel clamp. Power supply fastens behind TV receiver. Provision for 1 receiver. 300-ohm input and output. For 110-120 VAC. Amplifier, 3¼x4⅝x2¾". Power Supply, 4x2½x2¼". Wt., 2 lbs.
11 A 1116. .... 39.95

INPUT
M 118
BROAD BAND AMPLIFIER
FINCO
OUTPUTS

M-118 DISTRIBUTION AMPLIFIER

Fully silicon transistorized 82-channel broadband amplifier with 9 dB gain VHF and 7 dB UHF at each of four 75-ohm outputs. Input: 75 ohms. High stability and low noise figure. Ideal for deluxe multi-set systems. Snow-free color or black-and-white pictures. "F" connectors. 110 VAC, 60 Hz. 5½x3⅝x1⅝". Shpg. wt., 1 lb.
11 A 1148. .... 29.95

M-23 75-OHM ANTENNA AMPLIFIER

Same as M-22, but for 75-ohm coaxial, low-interference download. Provides high gain for bright color and sharp steady black-and-white. Pulls in weaker channels without a signal overloading problem. Requires matching transformer for use at 300-ohm television set. Amplifier: 3¼x4⅝x2¾". Power Supply: 4x2½x2¼".
11 A 1140. Shpg. wt., 2 lbs. 41.95

M-115 DISTRIBUTION AMPLIFIER

Silicon transistor broadband distribution amplifier provides gain of 15 dB UHF/VHF. Single 75 ohm "F" connector output. High degree of stability while retaining exceptionally low noise figure of 4.5 dB VHF, 8 dB UHF. Channels 2-83, plus FM. Input, 75 ohms. For 110 VAC, 60 Hz. Size, 5½x3⅝x1⅝".
11 A 1162. Shpg. wt., 1 lb. 29.95

MOSLEY CUSTOM ANTENNA INSTALLATION ACCESSORIES

CUSTOM WALL MOUNTING ANTENNA OUTLETS

- Attractive Ivory Colored Plastic
- Plates for Every Requirement
- Include All Rotor and Line Plugs

Ivory-colored plastic wall plates, complete with matching plugs for black-and-white and color VHF UHF TV (or FM) transmission line. Can be flushed-mounted on wall with bracket supplied, or over standard electrical outlet box. Types include those for flat, oval and round 300-ohm twin-line; shielded 300-ohm twin-line; 75-ohm coaxial cable; and types with provision for AC outlet. Some types have connections for antenna rotator cable, in addition to antenna transmission line. All plugs needed for each type are included plus hardware and complete instructions. Av. shpg. wt., 8 oz.

A FOR FLAT, OVAL AND ROUND 300-OHM TWIN-LINE

*Type FD-1PK includes a built-in switch to eliminate any open-end line losses when more than one plate is connected to the same twin-line.

Stock No.	Type No.	Connections For	EA.
11 A 1753	F-1PKB	1 twin-line	1.23
11 A 1754	*FD-1PKB	1 twin-line	1.39
11 A 1755	F-11PKB	2 twin-lines	1.46
11 A 1756	F-145PKB	1 twin-line and 4- or 5-wire rotor	2.16
11 A 1757	F-245PKB	2 twin-lines and 4- or 5-wire rotor	2.48

A FOR SHIELDED 300-OHM TWIN-LINE

Stock No.	Type	Description	EA.
11 A 1760	BL-1PK	1 sh. twin-line	1.67

B FOR RG59/U 75-OHM COAX

Stock No.	Type	Description	EA.
11 A 1761	FCC-1-PK	1 coax outlet	2.64
11 A 1762	FCC-145-PK	1 coax outlet and 4 or 5-wire rotor	3.63

B FOR BC6/U 75-OHM COAX

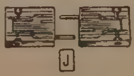
Stock No.	Type	Description	EA.
11 A 1007	FCC-61-PK	1 coax outlet	2.64
11 A 1018	FCC-6145-PK	1 coax outlet, 4 or 5 wire rotor	3.63

C FOR CABLE AND AC OUTLETS

Metal barrier-plate for mounting with standard 2-gang electrical outlet box.

Stock No.	Type	Description	EA.
11 A 1763	AC-1PKB	1 twin-line	1.87
11 A 1764	AC-11PKB	2 twin-lines	2.28
11 A 1765	AC-145PKB	1 twin-line, 4or5wire rotor	3.24
11 A 1766	AC-245PKB	2 twin-lines, 4or5wire rotor	3.82

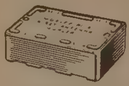
SOLDERLESS CONNECTORS



A wide selection of solderless plugs, sockets, and connectors. Specially designed for use with flat, oval, round, and shielded antenna twin-line and multiple conductor rotor cables. Easy to assemble without soldering —just strip wires, insert, tighten screws. Provide sure, fast contact, permit quick connect and disconnect. All are molded of low-loss polystyrene for constant impedance. All units listed are clear except *ivory color. †Pair. Av. shpg. wt., 2 oz.

Stock No.	Type	Fig.	Description	EA.
11 A 1482	27-S	D	Twin-line splicer	.17
11 A 1688	*BL-3S	D	Sh'ld. t.-l. splicer	.90
11 A 1767	*303B	F	T-line male plug	.29
11 A 1768	*BL-300	F	Sh'ld. t.-l. m. plug	.65
11 A 1769	*345B	F	4-5 wire male plug	.76
11 A 1636	*365	E	4-5 wire female pl.	.93
11 A 1511	301	H	Male twin-line	.31
11 A 1506	311	G	Female twin-line	.25
11 A 1635	†321	J	Polarized connect.	.56

TV COUPLERS



For multiple TV-FM set installations in apartments, motels, schools homes, etc. Low-loss printed circuit couplers isolate output and equally distribute signal. Four-set coupler may be used with 2, 3, or 4 receivers. Wt., 6 oz

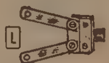
FOR FLAT, OVAL AND ROUND TWIN-LINE

Stock No.	Type	Description	EACH
11 A 1287	PC-4	4-set coupler	1.95
11 A 1288	PC-2	2-set coupler	1.12

FOR SHIELDED 300-OHM TWIN-LINE

11 A 1687	BL4PK	2, 3, or 4 sets	2.51

MOSLEY ACCESSORIES WITH SOLDERLESS CONNECTIONS



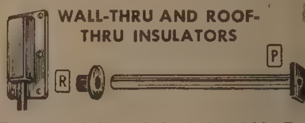
K **TYPE 343-PKB TRANSMISSION LINE SOCKET WITH PLUG.** Solderless. Mounts on baseboard or wall. With twin-line plug and mounting screws. Ivory.
11 A 1770. Shpg. wt., 2 oz. .... .71

L **TYPE 263S "Y-TY".** Strain relief conn. for use where distance between ant. terms. is 4" or less. Solderless.
11 A 1771 Shpg. wt., 2 oz. .... .64

M **TYPE 304-PK ANTENNA CONNECTOR.** For twin lead at TV set. Solderless.
11 A 1430. Shpg. wt., 2 oz. .... .66

N **TYPE F-42 2-WAY ANTENNA SWITCH.** Switch one antenna to either of 2 receivers, or 2 ants. to one rec. 300 ohms. UHF-VHF-FM. Ivory finish.
11 A 1571. Shpg. wt., 8 oz. 1.83

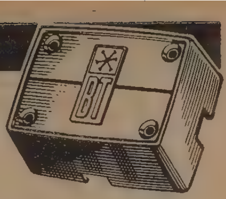
WALL-THRU AND ROOF-THRU INSULATORS

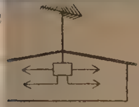


P **TYPE 625 WALL-THRU INSULATOR.** For walls up to 13". Tube 14" long with inside plate and outside cap. Ivory plastic.
11 A 1022. Shpg. wt., 1 lb. 1.1

R **TYPE M-60 ROOF-THRU AND WALL-THRU** Weatherproof. For wall or sloped roof. For all twin lead, coax, rotor cables.
11 A 1772. Shpg. wt., 4 oz. 1.1

TV-FM Couplers, Splitters, Arresters

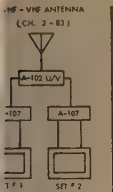




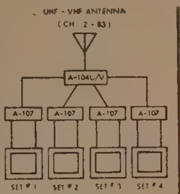
OPERATE UP TO FOUR SETS FROM A SINGLE ANTENNA

Low-loss couplers and splitters let you connect more than one TV or FM set to a single antenna, or split the signal for VHF and UHF terminals, while still receiving the full signal strength delivered to your antenna.

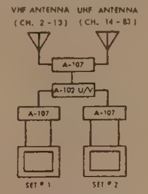
TYPICAL HOOKUPS USING SPLITTERS AND COUPLERS



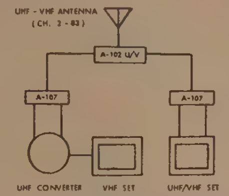
wo Sets from
bination Antenna



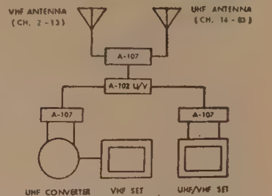
Three or Four Sets Combination Antenna



Two Sets—Separate UHF and VHF Antennas



Two Sets Operated from Combination Antenna and UHF Converter



Two Sets Operated from Separate UHF and VHF Antennas and UHF Converter

BLONDER-TONGUE UHF/VHF/FM COUPLERS AND SPLITTERS

; UHF/VHF-TV SPLITTER. For connecting one UHF and one VHF antenna to a single downlead. Can also be used to split signal ı a single antenna for feeding a TV set with separate UHF-VHF ·nna input terminals. 15 dB isolation; 0.5 dB insertion loss. strip 300-ohm terminals. Size, 1¼x2⅞x2¼".
A 1432. Shpg. wt., 5 oz. 3.60

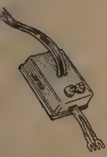
| TWO-SET UHF/VHF COUPLER. Has one input from antenna and combination UHF/VHF outputs. Feeds UHF-VHF signals nnels 2 to 83) from a single downlead to two TV sets, each ing a single UHF or VHF antenna input terminal. No-strip ıinals. Size, 1¼x2⅞x2¼". Shpg. wt., 5 oz.
A 1078. . . . . 2.20

4562 FOUR-SET UHF/VHF COUPLER. Has one input from antenna and four combination UHF/VHF outputs. Feeds UHF-VHF signal from a single downlead to up to 4 TV sets. Size, 1¼x2⅞x2¼".
11 A 1076. Shpg. wt., 5 oz. 3.35

4563 VHF/UHF ECONOMY SPLITTER. Splits signal from single VHF/UHF downlead for feeding TV set with separate VHF-UHF terminals. 300 ohm resistance. Loss: 5.5 dB (VHF), 7.0 dB (UHF).
11 A 1572. Shpg. wt., 4 oz. 86

3392 VHF/UHF TV SPLITTER. Splits signal from a single UHF/VHF downlead for feeding a TV set with separate UHF-VHF antenna input terminals. Size, 1¼x2⅞x2¼".
11 A 1620. Shpg. wt., 4 oz. 2.25

JFD INDOOR SIGNAL SPLITTERS FOR FM, COLOR OR BLACK & WHITE TV

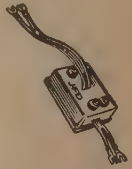


- VHF/UHF Splitter assures sharp, clear pictures in color or Black/white

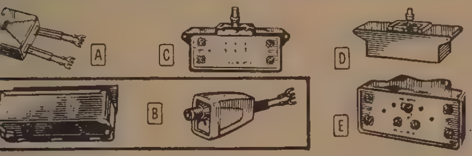
JFD SS21 VHF/UHF TV SPLITTER. Splits signal from a single UHF/VHF downlead for feeding a TV set with separate UHF-VHF antenna terminals. Shpg. wt., 4 oz.
11 A 1036. . . . . 2.60

- VHF/UHF/FM Splitter allows one antenna to do the job of three

JFD SS83 VHF/UHF/FM SPLITTER. Splits signal from single VHF/UHF/FM downlead for a TV set with UHF-VHF antenna terminals plus a separate FM receiver. Shpg. wt., 4 oz.
11 A 1037. . . . . 3.32



SWITCHES, ATTENUATORS, TRANSFORMER-SPLITTER



JERROLD T-380A-DP. TRANSFORMER-SPLITTER. Handy transformer for all-channel coaxial antenna system. Matches 75-ohm coaxial le to 300-ohm TV sets, to use 75-ohm cable for improved color reception. Splits antenna signals to provide separate UHF and F antenna inputs to TV sets. Isolates line from AC-DC receiv- Low loss. Hardware for back of set mount. 3x3x2".
A 1643. Shpg. wt., 4 oz. 4.77

JERROLD CAT-2-DP. MATCHING TRANSFORMER KIT. Adapts VHF/UHF TV and FM antenna installations for 75-ohm coaxial le. Mast-mount transformer that matches 300-ohm antenna, unting bracket, strap, plus set-mount transformer. Wt., ½ lb.
A 1258. . . . . 4.92
A 1740. T-379. UHF/VHF 75/300-ohm transformer. 4 oz. . 1.50

JFD AS-1 3-WAY ANTENNA SWITCH. Bat-handle switch for connecting any one of three separate antennas to one set; or one enna to any of three sets. Ideal for multiple installations where antenna or one set is used at a time. 5x2x1¼".
A 1291. Shpg. wt., 4 oz. 2.69

JFD AS-5 3-WAY ATTENUATOR SWITCH. Three-way switch reduces TV or FM overloading problems. Bat-handle switch selects two els of attenuation—15 or 25-dB—or no attenuation. Eliminates ture "tear-out." 300 ohms. Back-of-set mtg. 5x2x1¼".
A 1622. Shpg. wt., 4 oz. 3.19

JFD AS-2 2-WAY ANTENNA SWITCH. Two-way slide switch connects one of two antennas to one set; or connects one antenna either one of two sets. For multiple installations where one anna or one set is used at a time. No-strip terminals. 5x2x1¼".
A 1305. Shpg. wt., 4 oz. 1.99

LIGHTNING ARRESTERS

F **AT-110S TUBULAR LINE ARRESTER.** Protects receiver from damage in the event of lightning striking the antenna by providing a ground path over which the high current will pass. For 300-ohm tubular twin-line. Supplied complete with 10" hanger strap, hardware. U.L. Listed. Size, 2¼x1x1¼". Shpg. wt., 8 oz.
11 A 1001. . . . . 1.69

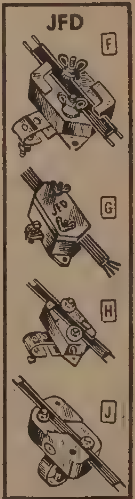
G **AT-104S ROTATOR LINE ARRESTER.** For 4-wire rotator lead-in. Makes positive contact with conductors. With ground lug and 10" hanger strap. U.L. Listed. Size, 1⅛x2x2". Shpg. wt., 8 oz.
11 A 1109. . . . . 2.09
11 A 1094. AT-106S. Similar to above but for 5-wire lead-in. Wt., 8 oz. 2.79

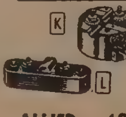
H **AT-105S. FLAT-LINE ARRESTER.** Can be mounted on mast or pipe. With 10" hanger strap. U.L. Listed. Size, 1⅛x2x2". Shpg. wt., 15 oz.
11 A 1110. . . . . 1.29

J **AT-102S FLAT-LINE ARRESTER.** For flat-type twin lead. Waterproof. Mounts on mast or pipe. Supplied complete with 10" hanger strap, 4' ground wire, and necessary hardware. U.L. Listed. 1½x3½x1¾". Wt., 15 oz.
11 A 1530. . . . . 2.49

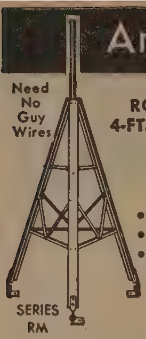
K **G-C TELCO 8642 TELEVISION LIGHTNING ARRESTER.** Use with any twin-line lead-in. Single screw mounting. U.L. Listed. Size, 2x2x¾". Shpg. wt., 6 oz.
11 A 1082. 82

L **RADIO LIGHTNING ARRESTER.** For series insertion in single-wire antenna lead-in. Made of moisture-proof porcelain. U.L. Listed. 1x3½x1". Shpg. wt., 6 oz.
11 A 1091. 59





Antenna Towers and Installation Accessories



ROOF-MOUNTING 4-FT. to 8-FT. TOWERS

Low as

7^{85}

- Fit Any Roof
- Easy to Install
- Long Lasting

Made from Beaded Channel Leg Material

Self-supporting; no guys needed when securely anchored to roof. 3 hinged feet fit any roof; antenna is assembled and "walked-up" into place. Galvanized, beaded steel channel withstands rough weather. Packages include tower with mast and mast kit (RM4 and RM8 less mast). Mast recesses 2 feet into tower. Permits antenna heights of 10 ft. or 14 ft. above roof. Shipped knocked down; assemble quickly and easily. With complete instructions.

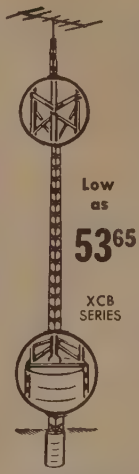
11 A 2358 ZW. RM4-8. 4-ft. tower, 8-ft. mast, mast kit. 20 lbs. 10.20

11 A 2359 ZW. RM4. 4-ft. tower, mast kit. 14 lbs. .7.85

11 A 2364 ZW. RM8-8. 8-ft. tower, 8-ft. mast, mast kit. 30 lbs. 16.95

11 A 2365 ZW. RM8. 8-ft. tower, mast kit. 24 lbs. 14.50

SPAULDING ANTENNA TOWERS



CYLINDER-BASE TOWERS—14-FT. to 55-FT. HIGH

Need No Concrete Foundation—Set into Cylinder Base

SERIES XCB. High-strength, self-supporting towers. Assemble on ground or vertically. Special "culvert base" for quick, one-man installation. All-riveted 100% galvanized steel. Top holds any rotor. With base, adjustable hinge feet, 8-ft. mast and factory-assembled 8-ft. tower sections.

Stock No.	Type	Ant. Ht.	Sections	Lbs.	EACH
11 A 2294 ZF	X28CB	23'	2	104	53.65
11 A 2295 ZF	X36CB	31'	3	131	66.45
11 A 2058 ZF	X44CB	39'	4	170	84.80
11 A 2059 ZF	X52CB	47'	5	217	107.00
11 A 1832 ZF	X60CB	55'	6	271	132.45

SERIES EP "ECONOMY-PACK" STRATO-TOWERS

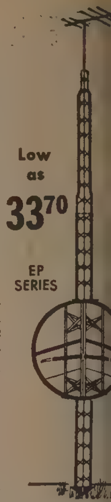
Easy to Install on Ground or Roof-Top

Include listed quantity of 8-ft. zinc-plated steel tower sections, ground plate with stakes, 8-ft. mast kit. Mount with house bracket or roof mount (not supplied), below. Require guying if room-mounted or over 16 ft. above house bracket. Includes EP-H1 house bracket below.

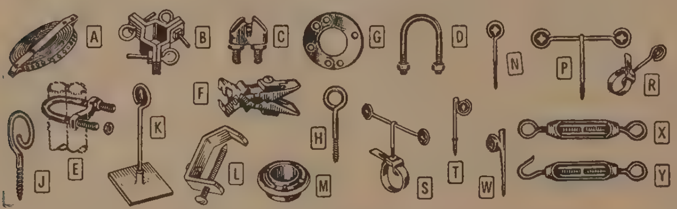
Stock No.	Type	Ant. Ht.	Sections	Lbs.	EACH
11 A 2541 ZF	EP-2	22'	2	62	33.70
11 A 2540 ZF	EP-3	30'	3	80	44.45
11 A 2535 ZF	EP-4	38'	4	99	53.65
11 A 2534 ZF	EP-5	46'	5	118	62.85
11 A 2543 F	EP-R1	Roof Base		2	4.70
11 A 2544 F	EP-H1	House Bracket		5	4.70

Low as

33^{70}



NOTE Spaulding towers are shipped truck F.O.B Frankfort, Indiana. No C.O.D. orders. Specify full shipping address—no Post Office box numbers. See Ordering Information pages for complete instructions.



A HANGER STRAP. Mounts masts to odd-shaped objects. ¾" perforated galvanized steel strapping. 12' coil. 1 lb.
11 A 1107 . . . . Each 69¢

B RING CLAMP. Supports guy ring on mast. Corrosion-resistant steel. Provides slip-proof grip. Fits mast up to 2½" diameter. Pkg., 1 lb.
11 A 1369 . . . . 49¢

C CABLE CLAMP. Provides non-slip grip on guy wire ends. Fits cables to 3/16" dia. ⅞x 7/16". Pkg., 4 oz. 2 per pkg.
11 A 1404 . . . . .Per Pkg. 43¢

D U-BOLT. Galvanized steel. With nuts and washers. Fits masts to 1½" O.D. Pkg. wt., 4 oz. 2 per pkg.
11 A 1122 . . . . .Per Pkg. 25¢

E MAST CLAMP. Tight-grip yoke. For 2 masts, max. O.D. 1⅜" each. Galvanized steel. Pkg., 4 oz. 2 per pkg.
11 A 1123 . . . . .Per Pkg. 59¢

F ANTENNA CLIP. Clips lead-in to antenna terminals. Pkg., 10 oz. 4 per pkg.
11 A 1405 . . . . .Per Pkg. 55¢

G GUY RING. Rests on ring clamp. For 1¼ O.D. masts. Pkg., 10 oz. 5 per pkg.
11 A 1124 . . . . .Per Pkg. 75¢

H CLOSED HOOK EYE. Anchors guys. 5" long. Pkg., 10 oz. 5 per pkg.
11 A 1126 . . . . Per Pkg. 39¢

J OPEN HOOK EYE. Anchors guy wires securely to roof. Screws into wood. Galvanized steel resists rust, corrosion. Pkg. 10 oz. 5 per pkg.
11 A 1125 . . . . .Per Pkg. 33¢

K "STICK-ON" STAND-OFF SUPPORT KIT. Heavy-duty supports have pressure-sensitive backing that sticks to brick, masonry, wood or aluminum siding, glass. Standoff screws into plastic shaft. Supports with stand-offs. Shpg. wt., 10 oz. Pkg. of 3.
11 A 1143 . . . . .Per Pkg. 99¢

L GROUND CLAMP. For secure connection to water pipes up to 1¼" dia. Screw terminal for ground wire. Shpg. wt. per pkg., 4 oz. 2 per pkg.
11 A 1433 . . . . .Per Pkg. 39¢

M ALUMINUM FLOATING GUY RING. Fastens easily and quickly with set screw. Permits guyed mast to be rotated. Takes 3 or 4 guys on any mast to 1⅜" outside diameter. Shpg. wt. 8 oz.
11 A 1296 . . . . .Each 1.59
11 A 1311. As above, takes 3 or 4 guys on any mast to 1¾" O.D. Shpg. wt., 9 oz. Each 1.69

N UNIVERSAL STAND-OFFS. For any TV antenna lead-in. Polyethylene insulation. Screw-in type. Shpg. wt. per pkg., 10 oz. 5 per pkg.
11 A 1127. 3½" Long . . . . .Per Pkg. 28¢
11 A 1128. 5½" Long . . . . .Per Pkg. 33¢
11 A 1129. 7½" Long . . . . .Per Pkg. 39¢

P DOUBLE STAND-OFFS. Wood-screw type hold two leads. For any TV lead-in. Pkg., 10 oz. 5 per pkg.
11 A 1132. 3½" Long . . . . .Per Pkg. 74¢
11 A 1133. 5½" Long . . . . .Per Pkg. 82¢
11 A 1134. 7½" Long . . . . .Per Pkg. 85¢

R STRAP-TYPE SINGLE STAND-OFFS. Mou on mast. For any lead-in. Fit up to masts. Pkg. wt., 6 oz. 3 per pkg.
11 A 1137. 3½" Long . . . . .Per Pkg. 3
11 A 1138. 5½" Long . . . . .Per Pkg. 4
11 A 1139. 7½" Long . . . . .Per Pkg. 4

S STRAP-TYPE DOUBLE STAND-OFFS. above, but hold two lead-ins. Clamp to 3" mast. Pkg., 8 oz. 3 per pkg.
11 A 1135. 3½" Long . . . . .Per Pkg. 7
11 A 1136. 7½" Long . . . . .Per Pkg. 7

T DRIVE-IN STAND-OFFS. For all types lea in. 3½" long. Pkg., 5 oz. 5 per pkg.
11 A 1130 . . . . .Per Pkg. 3

W UNIVERSAL HOT NAIL STAND-OFFS. F any lead-in. Hold in wood or mortar. starting hole is needed. 3½" long. Pkg., 4 5 per pkg.
11 A 1131 . . . . .Per Pkg. 6

CAST ALUMINUM TURNBUCKLES. Provide ea adjustment of guy-wire tension. Shpg. per pkg. 8 oz. 4 per pkg.

Stock No.	Fig.	Closed	Open	PER PK
11 A 1407	Y	5½"	7⅝"	.69
11 A 1409	Y	7½"	10½"	1.59
11 A 1410	X	5½"	7⅝"	.69
11 A 1412	X	7½"	10½"	1.59

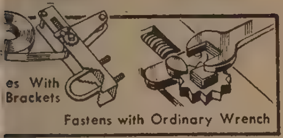
COPPERWELD ANTENNA AND GUY WIRE

Finest grade high-tensile copper weld wire. For use with antennas or guying antenna towers and masts. Copper outer conductor bonded to a steel core for exceptional strength and durability. 12 to 18 gauge. In 100 ft., 250 ft. and 500 ft. rolls.

Stock No.	Ga.	Ft.	Lbs.	PER ROLL
11 A 1357	12	100	2	3.16
11 A 1358	12	250	5	7.49
11 A 1359	14	100	1½	2.74
11 A 1360	14	250	3	5.87
11 A 1361	18	250	2	2.50
11 A 1362	18	500	3	3.75

Antenna Installation Mounts and Masting

CHIMNEY MOUNTS

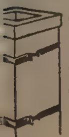


RATCHET CHIMNEY MOUNT

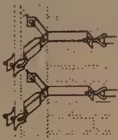
ow as 4^{19}

- For Masts to 1½″ Dia.
- Withstands High Winds
- Stainless Steel Strapping

a-rugged chimney mount designed to stand high winds, adverse weather. ens to chimney with wrench. With 12- ainless steel strapping, 2 brackets.
1322. Wt., 3½ lbs. 4.19
1328. Above, but 18′ strap. 4 lb. 4.95



A 2^{59}



B Low as 3^{19}

HIMNEY MOUNT. Sturdy low-cost ount for TV or FM antennas. Has less steel strappings. Brackets are y-gauge steel, zinc-plated and dichrom- lipped for long life. Easily adjusted for , firm grip. For masts to 1¾″ dia. With 10-ft. straps, hardware. Wt., 4 lbs.
1113 . . . . 2.59

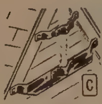
NAP-IN CHIMNEY MOUNT. Fit masts to ¾″ O.D. 4″ chimney clearance. Steel kets zinc-plated, dichromate-dipped to ect against corrosion. Simply "snap" in place, tighten bolts. With two 12-ft. less steel straps. Wt., 4 lbs.
1242 . . . . 3.19

A 1142. As above, but with two ¾″ x . stainless steel straps. 4 lbs. 3.95

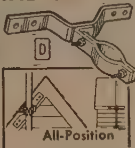
A 1144. Snap-in mount with gold finish; ¾″ x 12-ft. straps. 4 lbs. 4.05

A 1146. Snap-in mount with gold finish; ¾″ x 18-ft. straps. 4 lbs. 5.04

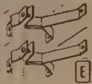
WALL AND EAVE MOUNTS



C 4^{95}



D



E Low as 99¢

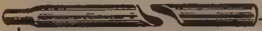
C **EAVE MOUNT.** For mounting antenna mast on building eaves, 48″ lower bracket straddles building. Top bracket mounts on peak. Zinc-plated and dichromate-dipped. For masts to 1¾″ O.D. 5½ lbs.
11 A 2504 XW. 4.95

D **ALL-POSITION MAST BRACKET.** Heavy-duty steel; holder swivels 360° for mounting in any position. For telescoping masts to 3″ O.D. Ideal for ground-up masts. 2½ lbs.
11 A 1011 W. 2.18

HEAVY-DUTY WALL MOUNTS (Not illus.) Bracket legs 16″ apart to match studs of homes. Heavy-gauge steel.
11 A 2130 XW. 24″ from Wall. 10 lbs. 4.95
11 A 2129 XW. 18″ from Wall. 5 lbs. . 3.69
11 A 1256. 12″ from Wall. 5 lbs. 2.49

E **CLOSE-WALL MOUNTS.** For areas where large clearance is not needed. For masts to 1¾″ O.D. Heavy-gauge steel.
11 A 1173. 2¼″ from Wall. 1 lb. . . . . . . 99¢
11 A 1215. 4″ from Wall. 2 lbs. 1.29

ANTENNA MAST SECTION

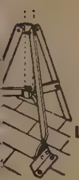


AVAILABLE WITH GOLD ANODIZING

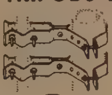
Strong, seamless hot-dipped galvanized steel masts with swaged ends and locking joint. 1¼″ outside diameter.

Stock No.	Ft.	Gauge	Wt.	EACH
11 A 2119 XW	5	18	2¼ lbs.	1.19
11 A 2121 XW	5	16	2¾ lbs.	1.39
11 A 2335 ZW	10	18	5 lbs.	2.14
11 A 2122 ZW	10	16	7 lbs.	2.55
NEW GOLD ENAMEL FINISH MASTS				
11 A 2107 XW	5	18	2½ lbs.	1.39
11 A 2106 XW	5	16	3 lbs.	1.59
11 A 2105 ZW	10	18	5 lbs.	2.19
11 A 2104 ZW	10	16	7 lbs.	2.64

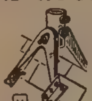
TRIPODS AND ROOF MOUNTS



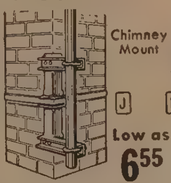
F Low as 4^{39}



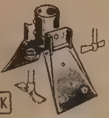
G 1^{98}



H 4^{29}



J Low as 6^{55}



K Low as 1^{39}

ANTENNA BASE. Accepts masts of 10 ft. or more and up to 1½″ O.D. Eliminates wires in most installations. Set-screws hor mast and permit orientation. Elec- galvanized and dichromated. 2 ft. high. g. wt., 7 lbs.
A 2040 XW. 4.39
A 2043 XW. As above, but 3 ft. high. g. wt., 6½ lbs. 4.95
A 2044 XW. As above, but 5 ft. high. g. wt., 15 lbs. 8.29

VENT PIPE MOUNT. For clamping to any pipe or vent from 4″ to 6″ in diameter. fect for antenna installations where mney is inaccessible. Heavy-gauge steel. all masts up to 1¾″ diameter. Zinc- ted, dichromate-dipped for long life. 2 pkg. Shpg. wt., 3 lbs.
A 1351 . . . . Per Pkg. 1.98
A 1363. For 2″ to 4″ vents. Shpg. wt., lbs. Per Pkg. 1.98

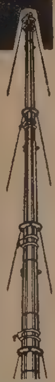
H **"NO-GUY" ROOF MOUNT.** Durable steel and cast-iron base for up to 10-ft. mast. Needs no guys. Legs adjust to roof angle. For masts to 1½″ dia. 5 lbs.
11 A 1251 . . . . 4.29

J **CHIMNEY MOUNT WITH RATCHET.** Provides fast, safe and neat installation; assures vertically straight mast. Rugged 1-pc. construction with single triple-duty ratchet strap, aluminum corner guards, dual brackets for masts to 1½″ dia. With 12-ft. stainless steel strapping. Shpg. wt., 6 lbs.
11 A 1253 . . . . 6.55
11 A 1254. As above, but with 18-ft. stainless steel strapping. 6½ lbs. 6.95

K **HINGED ROOF MOUNTS.** Ideal for peaked or flat roofs, walls. Extra heavy-duty steel. For masts to 1½″ dia. 3 lbs.
11 A 1381 . . . . 1.39
11 A 1752. Above, but roof mount is for masts up to 2¼″ dia. Wt., 4 lbs. 2.39

TELESCOPING TV ANTENNA MASTS

20-Ft. 6^{75} 50-Ft. 18^{95}



- Made of High-Carbon Steel Tubing
- Hot-Dipped Galvanized
- Floating Guy Ring Permits Rotation

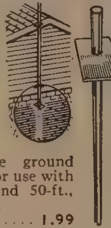
50-FT. MAST. Heavy-duty for TV (or FM) antenna array. Bolts lock each section in place. Hot-dipped 18-gauge high-carbon steel tubing. Consists of 5 mast sections—O.D.: #1, 1¼″; #2, 1½″; #3, 1¾″; #4, 2″; #5, 2¼″. Hardware. 42 lbs.
11 A 2103 ZW. 18.95

40-FT. MAST. 4 rugged sections (see sizes listed above); Nos. 1, 2, 3, and 4. Maximum height 40 feet. Shpg. wt., 32 lbs.
11 A 2102 ZW. 14.50

30-FT. MAST. Consists of 3 rugged sections: Nos. 1, 2, and 3 described above. Maximum height 30 feet. Shpg. wt., 22 lbs.
11 A 2101 ZW. 10.15

20-FT. MAST. 2 sections. Consists of mast sections 1 and 2 above. Maximum height, 20 feet. Shpg. wt., 13 lbs.
11 A 2100 ZW. 6.75

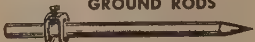
DRIVE-IN GROUND STAKE FOR TELESCOPING ANTENNA MASTS



1^{99} Easy to Install

Sturdy, drive-in type ground mount base. Suitable for use with 20-ft., 30-ft., 40-ft., and 50-ft., masts. Shpg. wt., 5 lbs.
11 A 1013 XW 1.99

GROUND RODS



Selection of low-cost ground rods. Constructed of moisture-resistant copper-plated steel to assure a long-lasting, low resistance contact with earth. Complete with clamp. Each size includes bolt.

Stock No.	Size	Shpg. Wt.	EACH
11 A 2537 XW	4′x⅜″	1½ lbs.	.75
11 A 2538 ZW	6′x⅜″	2¼ lbs.	.98
11 A 2539 ZW	8′x½″	4¼ lbs.	1.98

GROUND AND GUY WIRE

ALUMINUM GROUND WIRE. No. 8 solid wire. For all grounding applications.

Stock No.	Coil Feet	Wt., Lbs.	EACH
11 A 1557	50	1½	.79
11 A 1558	100	2¼	1.59
11 A 1559 XW	1000	26	14.95

NO. 20 GALVANIZED GUY WIRE. 6-strand wire in 100-ft. or 1000-ft. rolls.
11 A 1560. 100-Ft. Roll. 2 lbs. . . . . 69¢
11 A 1561 XW. 1000-Ft. Roll. 20 lbs. . . 6.50

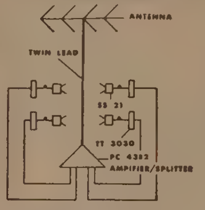
NO. 18 GALVANIZED GUY WIRE. For heavy-duty use. 100-ft. or 1000-ft. rolls.
11 A 1562. 100-Ft. Roll. 2½ lbs. 1.09
11 A 1563 XW. 1000-Ft. Roll. 25 lbs. . 10.95

"PLASTIGARD" PLASTIC-COVERED GALVANIZED GUY WIRE. High tensile strength wire with green transparent jacket. Resists sunlight, corrosion, wind, snow and temperature changes. Heavy-gauge plastic extruded over stranded galvanized steel wire.
11 A 1181 XW. 100-Ft. Roll. 2½ lbs. . . 2.19
11 A 1183 XW. 1000-Ft. Roll. 25 lbs. . 19.95

HIPPING NOTE: Items with suffix U, W or Z in stock no. sent truck or express. See Ordering Information pages.

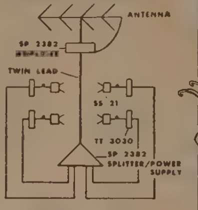
JFD Home TV Distribution Systems

MEDIUM-FRINGE AREA SYSTEM

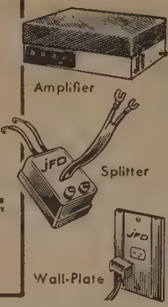


43^{82} $5 monthly*

DEEP-FRINGE AREA SYSTEM



56^{12} $5 monthly*



MEDIUM-FRINGE AREA SYSTEM

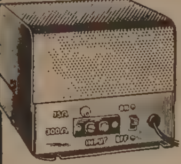
HS-41-300. Quality 4-set distribution system for mediu fringe areas. Covers VHF-UHF TV, plus FM. Include **PC-4382 Solid-State Indoor Amplifier/Splitter; Four SS2 UHF/VHF Signal Splitters; Four TT3030 Wall-Plates.** Gai VHF, 16 dB; UHF, 6.5 dB; FM, 6 dB. 300-ohms. transistor amplifier circuit. Amplifier size, 6½x3½x2 110-130 V, 60 Hz AC. Shpg. wt., 3 lbs.
11 A 1177..................................43.8

DEEP-FRINGE AREA SYSTEM

HS-42-300. Deep-fringe 4-set system distribution offe improved VHF-UHF and FM reception in all area Includes: **SP-2382 Solid-State Antenna Splitter/Powe Supply; SC72 300-Ohm 4-Way Splitter; Four SS21 UHF/V Signal Splitters; Four TT3030 Wall Plates.** Gain: VHF, dB; UHF, 12 dB; FM, 14 dB. Amp, 6½x2¾x2½" moun on crossarm or mast; power supply, 3x4⅝x1½", moun indoors. 300 ohms. 115 VAC. Shpg. wt., 3 lbs.
11 A 1178 ....56.1

Blonder-Tongue TV-FM Distribution Systems

These top-quality distribution systems amplify the signal from your TV or FM antenna permit delivering a strong, clear signal to up to 150 receivers. Ideal for homes, schoo motels, or any large building. All are designed for maintenance-free operation.

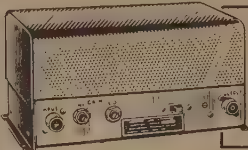


HIGH-GAIN VHF TV/FM AMPLIFIER

46^{75}
$5 monthly*

- 25 dB Minimum Gain VHF and FM
- 75/300 Ohm Input and Output
- Gain Controls for Adjustable Output

1202. Low-noise broadband amplifier for large home systems, motels, small MATV systems, etc. Drives up to 50 sets. Has 75 and 300 ohm inputs and outputs; low-noise figure (Ch. 2-6, 4 dB; 7-13, 6 dB; FM, 4 dB). Gain control range of 15 dB on all channels. 6⅛x4¾x 5¾". 105-129 VAC. Wt., 4½ lbs.
11 A 1163.......................46.75

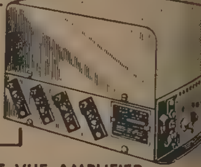


MLAC
114^{00}
$6 monthly*

LARGE SYSTEM VHF TV AMPLIFIER

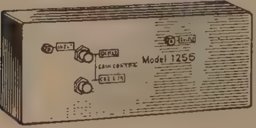
MLAC. VHF TV anplifier provides a gain of 40 dB on channels 2-13. Supplies adequate power to operate up to 150 sets with proper antenna distribution system. Two or more units may be used in series for additional gain when extremely long lines are used. Offers maximum signal fidelity for both color and black-and-white TV. Separate controls make it possible to adjust either high (channels 7-13) or low (channels 2-6) band to compensate for differing input signal strengths. 75-ohm coaxial input and output connectors. Seven tubes. In rugged, well-ventilated metal cabinet, 9x6x5". For 110-120 volts, 60 Hz AC, Shpg. wt., 9 lbs.
11 A 1365.......................114.00

DA8-B
68^{85}
$5 monthly*



8-SET VHF AMPLIFIER

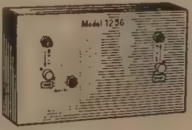
DA8-B. Combination signal booster and is lation-distribution system for use in sma apartment buildings, homes, motels. Ha outputs for up to 8 TV sets, with 22 d minimum isolation between outputs to pr vent interference between sets. 10 dB gai on all VHF channels for bright, clear pi tures. Gain control range of 10 to 1 protec system from overload. Low-noise all-trio circuit. Has inputs and outputs for 75 300-ohm lines. One output may be used feed another DA8-B for additional hookup Includes power supply, terminating resis ors, grounding clamp, screw terminal 5x9x5½". 110-120 V, 60 Hz AC. Wt., 6 lb
11 A 1248 ....68.8



CVB-30P BROADBAND VHF/FM AMPLIFIER

- Silicon Transistor Circuit
- Input for Powering Preamps
- High and Low Gain Controls

CVB-30P. Broadband VHF/FM amplifier for homes, showrooms, small MATV systems, etc. Handles up to 50 sets. Has two 75-ohm inputs; one for direct connection to antenna; the other has duplexed low-voltage AC for powering a mast-mounted preamp. Gain: 30 dB on all VHF channels. Output impedance, 75 ohms. Two controls, for high channels 7-13 and low channels 2-6-FM, balance gain. F connectors; 3-wire power cord. 8²³⁄₃₂x3⁷⁄₁₆x2⅝". 105-129 VAC.
11 A 1725. Shpg. wt., 4 lbs. 58.45

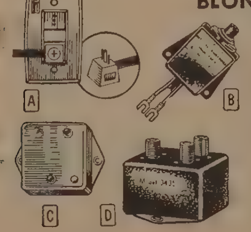


CVB-29P HIGH-GAIN UHF AMPLIFIER

- Silicon Transistor Circuit
- Eliminates Need for Converter
- Provides Sharp, Clear Pictures

CVB-29P. Excellent high-gain, high-output broadband UHF ampl fier gives up to 30 dB gain for use in medium and small MATV sy tems. Eliminates need for UHF to VHF converter. Built-in UH VHF multiplexers permit use with companion VHF amplifie (CVB-30P at left), for all-channel reception. High and low-ga controls, input for powering preamps. 75-ohm input and outp impedances. Size, 8¾x5¼x3⅜". 3-wire power cord. 110-120 VA
11 A 1726. Shpg. wt., 3¼ lbs. 100.0

BLONDER-TONGUE DISTRIBUTION SYSTEM ACCESSORIES



[A] COLORTAP 3650. Two UHF/VHF/FM outlet plugs. 300 ohms. With two plugs.
11 A 1485. Shpg. wt., 6 oz.....................1.82
11 A 1486. Rotortap-2. 4560. 4 or 5-wire rotor socket, plug, two 300-ohm outlets..........3.57

[B] 4564 VHF/UHF. Adapts 75-ohm coax to 300 ohms. 3x2x1".
11 A 1274. Shpg. wt., 4 oz...................1.93

[C] 4515. VHF/FM splitter. Indoor 2-way hybrid. Separates one 75-ohm coax input into two 75-ohm outputs. Blonder-Tongue QD connectors accept type 59 cable. 2x2x2½". Wt., 8 oz.
11 A 1277..................................4.00

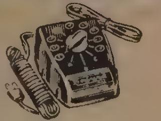
[C] 4537.VHF/FM splitter. Indoor 4-way hybri Separates one 75-ohm coax input into fou 75-ohm coax outputs. Blonder Tongue OD co nectors accept type 59 cable. 2x2x1½".
11 A 1276. Shpg. wt., 8 oz.....................5.3

[D] 3435 . VHF/UHF/FM splitter. Indoor way hybrid. Separates one all-channel 75-oh input into two 75-ohm outputs. Three type F co nectors: plugs for type 59 cable. 2x2x1½".
11 A 1278. Shpg. wt., 8 oz. 7.8

[D] 4535. VHF/FM splitter. Indoor 4-way hy brid. 5 type F connectors, plugs. 75 ohms.
11 A 1279. Wt., 8 oz..........................8.4

Radio-TV Accessories and Servicing Aids

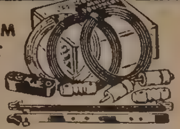
VHF/UHF TV CLARIFIER



95 **Installs in 60 Seconds**

ly device improves reception by ampli- the pickup power of your antenna. s filter out ghosts and interference; s up snowy pictures. 12-position switch lecting clearest picture. With 5′ twin- U.L. Listed. 110-120 AC or DC.
1209. Shpg. wt.. 2¼ lbs........5.95

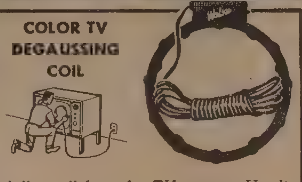
SHORTWAVE/AM ANTENNA KIT



2^{39}

"Pulls in" difficult-to-receive stations on shortwave and AM broadcast bands. Includes: 100′ 7x26 bare copper wire; 40′ lead-in; 25′ heavy-gauge ground wire; 2 insulators; window lead-in; lightning arrester; 2 nail knobs; ground clamp; instructions.
11 A 1239. Shpg. wt., 2½ lbs........2.39

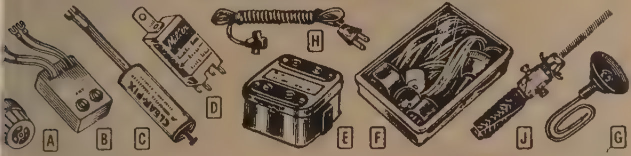
COLOR TV DEGAUSSING COIL



A "must" for color-TV owners. Use it just once and it pays for itself. Demagnetizes picture tube to remove unwanted patches of green on screen. 7″ diameter coil. Pushbutton on-off switch. With complete instructions. For 110-120 V, 60 Hz AC. Wt., 10 oz.
11 A 1048.....................5.95

11 A 1613. Professional Degaussing Coil. 13″ dia., 9′ cord. Wt., 2 lbs......19.95

ACCESSORIES FOR SERVICING, BETTER RECEPTION



NOISE KILLER AND STATIC FILTER. liminates noise from electrical appli-, power tools. Simply plug TV into killer, noise killer into AC outlet. ply reduces electrical interference. . wt., 4 oz.
1758........................ .69

ANTENNA INTERFERENCE FILTER. Stops terference due to planes, neon lights, oor transformers. Installs between an- lead-in wires and set terminals. Im- s color or black-and-white viewing. . wt., 3 oz.
1759........................ .98

UPEREX "CLEAR-PIX" INTERFERENCE FIL-ERS. Choice of units to overcome TV erence from various sources. For TV using 300-ohm twin lead. 5 oz.

No.	Type	Attenuates	EACH
1066	CPH	21 MHz Amateur	1.17
1068	CPF	Strong FM station	1.17
1067	CPI	Ignition or similar	1.17
1065	CPC	Citizens Band	1.17

MILLER ANTENNA TRANSFORMERS. Permits use of low-loss 52 or 72 ohm coax- able on 300 ohm receiver inputs. Two ired: one at antenna, one at receiver. ndoor or outdoor. ¾x¾x1⅜″. 3 oz.
1306. Type 6161. 52 ohms. **Each** 2.25
1309. Type 6162. 72 ohms. **Each** 2.25

L. DRAKE TV-300-HP HIGH-PASS FIL-ER. Eliminates or reduces interference ed by police, Amateur (including 6- r), Citizens Band, diathermy. 40 dB nuation, 0 to 52 MHz. Attaches to 300- antenna terminal. Size, 2½x2½x1⅛″. g. wt., 8 oz.
1160 ....3.97

Ⓕ EBY K-302 CRT EXTENSION HARNESS KIT Expedites testing of any black-and-white picture tube. Consists of 3-ft. anode extension harness; 4-ft. CRT socket harness designed for use with both electrostatic and magnetic tubes; 3-ft. octal yoke harness. Shpg. wt., 10 oz.
11 A 1035........................4.80

EBY K-320 CRT COLOR EXTENSION HARNESS KIT. Similar to K-302 extension harness kit listed above, but designed for color TV. Shpg. wt., 15 lbs.
11 A 1610.......................10.50

Ⓖ EBY AC-1 CRT HI-VOLTAGE CONNECTOR. Important replacement part for television servicing and repair work. Second anode connector. Silver-plated plug contacts for low-loss. 1½″ diameter rubber cap. 18″ heavily insulated wire lead. 4 oz.
11 A 1034........................ .69

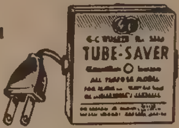
Ⓗ TV POWER CORD AND CONNECTOR. Identical to original equipment on most sets. 9 ft. long. U.L. Listed. 8 oz.
11 A 1049........................ .36
11 A 1032. 6-Ft. Cord, Conn. 6 oz...... .46

Ⓙ TRANSISTOR VARI-LOOPSTICK. Impedance tap, micrometer adjustment; snap-in mounting. Use 365 or 410 pF tuning capacitor. 7⁄16x2″.
11 A 1286. Shpg. wt., 4 oz.......... .73

VOKAR VIBRATORS

Auto radio vibrators for general replacement use. 1½x2⅝″. 8 oz.
11 A 1280. NP-42V. 6 V, 4 pins 1.79
11 A 1281. NP-7V. 12 V, 3 pins 1.79
11 A 1282. NP-42V. 12 V, 4 pins 1.79

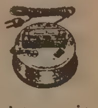
G-C ELECTRON TUBE SAVER



3^{97}

25-900. Quality electron tube saver especially designed to protect the critical electron tubes in color TV receivers. Rated 250-400 watts. Handles damaging voltage surges to protect tubes in all sorts of electronic devices—radios, TV's, hi-fi systems, etc. Easy to use—can be set up in just a few minutes. Simply plug device to be protected into tube saver; then plug tube saver into outlet. Size, 2¾x2½x1¼″. For 110-120 V, AC or DC. Shpg. wt., 7 oz.
11 A 1211 ....3.97

PERMA-POWER VOLTAGE REGULATORS



Low as 8^{25}

D200. Automatic voltage regulator maintains normal operating voltage for TV sets, hi-fi systems, similar equipment. Especially useful where line voltage is consistently low. Improves TV reception by eliminating picture shrinkage, flutter and loss of brightness due to low voltage. Automatically boosts voltage 10 volts when AC line voltage goes below 110. 300-watt capacity. Turns on and off with appliance. 4¾x4¾x2¼″.
11 A 1224. Shpg. wt., 2½ lbs........8.25

COLOR TV VOLTAGE REGULATOR

D210. Same as D200 above, but handles up to 400 watts. Especially recommended for use with color TV. Shpg. wt., 2½ lbs.
11 A 1303 ....14.25

PERMA-POWER PICTURE TUBE "BRITENERS" FOR LIKE-NEW TV

y as

20

Handy Plug-In Design,
No Rewiring Necessary

FOR BLACK-AND-WHITE TUBES

02 AUTOFORMER TYPE. Duodecal Base. ls life to aging picture tubes when dim- is due to low cathode emission—returns htness and contrast to picture. For allel or series sets with black-and-white ure tubes, 8″ or larger. Boosts filament er 50% to increase cathode emission. s not relieve cathode-filament shorts. g. wt., 8 oz.
1204........................2.20

12 110° AUTOFORMER TYPE. Button Base. above, for use with 110° button base es. Shpg. wt., 8 oz.
1205........................2.20

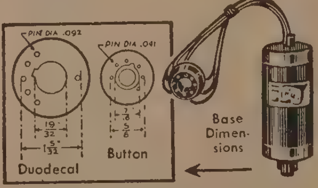
C-301 ISOLATION TYPE. Duodecal Base. Brightens and isolates parallel or series types. Select 6.3 V to relieve cathode-filament shorts; 7.8 V to increase emission.
11 A 1092. Shpg. wt., 10 oz.........2.62

C-311 ISOLATION TYPE. Button Base. Same as C-301, but for 110° button base tubes.
11 A 1093........................2.92

FOR COLOR TUBES

C-501 "COLOR BRITE." Brightens and restores color contrast and quality to aging color TV picture tubes. Increases filament voltage to boost cathode emission for sharper, clearer pictures. Use with 70° round 21″ color CRT's. Shpg. wt., 1 lb.
11 A 1227........................5.73

C-502. Similar to above, but only isolates parallel or series type television sets. For 70° round 21″ color picture tubes.
11 A 1232. Shpg. wt., 1 lb...........7.25



C-511. Extends tube life, brightens pictures. Boosts cathode emission by increasing filament voltage. For series or parallel wired sets using 23″ or 25″ rectangular color CRT's. Shpg. wt., 1 lb.
11 A 1663.............. 5.73

C-512. Similar to C-511 above, but only isolates circuit. Shpg. wt., 1 lb.
11 A 1259................. 7.25

GC Quality Radio-TV Alignment Tools and Kits

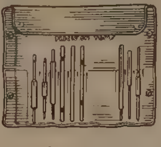
GC
GC PRECISION TOOLS

MODEL 8283 25-PC. ALIGNMENT KIT

15^{83}
- 25 Tools in Handy Roll-Up Case
- Several 9″ Long Tools Included
- For Radio, TV, Communications

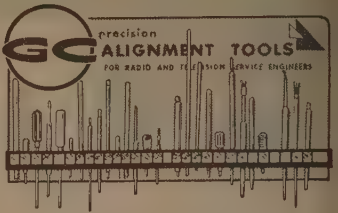
Complete 25-piece alignment tool assortment in a handy roll-up case. Contains alignment and adjustment tools for practically every radio and TV set on the market. Also has tools used on mobile communication, marine and amateur gear. In addition to tools in case, several 9″ long tools are furnished separately. Kit includes: K-Tran and IF aligner; alignment screwdrivers of various lengths; long-reach aligner; channel tuner; special short tools; core aligners; duplex aligner; IF and oscillator aligner; alignment wrenches; TV-FM tuners; Zenith-Admiral hex; thin tuning wand; and many more helpful alignment and adjustment tools. Shpg. wt., 1 lb.
26 A 1001 ....15.83

MODEL 9210 DELUXE 10-PC. CB ALIGNMENT TOOL KIT



4^{89}

Ten of the most useful tools for alignment and adjustment of Citizens Band transceivers, according to a trade publication's nationwide survey. Kit includes: alignment screwdrivers; K-Tran tool; core aligner; universal aligner; tuning wand; TV wrench and aligner; double end core tool; IF core alignment tool. Comes in flexible plastic carrying kit that rolls up for easy, compact storage in your tool caddy. Shpg. wt., 1 lb.
26 A 1676 ....4.89

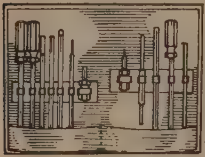


MODEL 9200 27-PC. RADIO-TV ALIGNMENT TOOL PANEL KIT

17^{52}
- 27 Most Needed Alignment Tools
- Convenient Wall-Mounting Panel
- Individually Marked Tool Slots

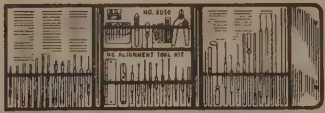
Convenient wall-mounting panel kit includes 27 of the most often used radio-TV alignment tools. Each tool has an individually marked slot in the sturdy, 3-color panel. Helps you to locate the desired tool immediately. Panel can be conveniently mounted on workshop wall or back of workbench for easy visibility and access. Tools are precision-made of finest materials including low-loss plastics and extra-hard bone fiber; tips are hardened spring steel. Kit includes: alignment screwdrivers of various lengths; special short tools; alignment wrenches; channel tuners; core aligners; oscillator adjustment tools; trimmer and IF aligners; solder probe; nylon replacement tip for long reach aligner; hex tools; and many other useful alignment tools. Size of convenient wall-mounting steel panel for holding tools is 9¾″ high and 18¾″ wide. Shpg. wt., 3 lbs.
26 A 1831 X........................17.52

TV-FM ALIGNMENT TOOL KIT



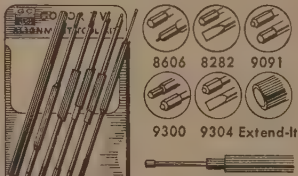
Here in one package are the necessary tools to align any TV or FM set. Kit contains one each of the following: ¼″ neutralizing wrench, wire dressing and alignment tool, K-Tran alignment tool, slotted stud driver, stubby stud driver, standard alignment tool, duplex alignment screwdriver, turret tuner tool, slotted screwdriver, double ender tool, IF alignment tool, and a slug saver tuner tool. With handy leatherette case. Shpg. wt., 1 lb.
26 A 1726..7.20

MODEL 5050 48-PC. ALIGNMENT TOOL KIT



Complete alignment tool kit featuring every tool needed by the professional serviceman or technician for precision alignment of radios, TV's, hi-fi units, all types of electronic equipment. Includes assortment of special alignment tools designed for Zenith and RCA TV sets; "twin end" TV aligners; alignment screwdrivers; channel tuning tool; capacitor and tuner adjusting tool; contact burnishing tool; service inspection mirror, much more. 45-pieces in all. Tools are in handy three-section pouch with fold over flap and snaps to prevent tools from falling out in transit. Each tool is fully visible in its own slot—easy to remove, easy to replace. All are top-quality G-C tools featuring the finest in functional design and precision construction. Pouch size (folded), 12¾x12x1¼″. Shpg. wt., 4 lbs.
26 A 1143 X.....................34.95

MODEL 8454 COLOR TV ALIGNMENT TOOL KIT



Extends Reach of Alignment Tools

Handy 7-piece kit features five most-needed alignment tools for color TV, plus "extend-it," a special attachment that makes long-reach aligners out of standard size tools. Includes one each: 8606, 8282, 9091, 9300, 9304 alignment tools; plus "extend-it" and pocket saver pouch. Tools are precision-made, designed for long dependable use. Shpg. wt., 4 oz.
26 A 1144.........................2.49

MODEL 5040 ALL-PURPOSE ALIGNMENT TOOL KIT

Convenient general-purpose alignment tool kit offers 12 most-popular tools for alignment of both color and black-and-white TV's. Tools are housed in durable plastic case with transparent front for fast, easy identification. Case rolls up for easy storage in service kit. Tools in kit include: 8729 long reach; 8289 "shorty"; 9050-L Zenith-RCA; 9089 Westinghouse alignment tools; 8276 duplex aligner; 8271 core aligner; 9091 iron-core aligner; 8606 Zenith-Admiral hex wrench; 5097 K-tran tool; 9088 heavy-duty soldering tool; 8607 Delrin long reach aligner; 8988 "X57" plastic long slim alignment tool. Tools are all precision designed for top performance. Each tool fits neatly into its own slot in pouch for efficient handling. Shpg. wt., 8 lbs.
26 A 1145 X.........................8.79

TOP-QUALITY PRECISION ALIGNMENT TOOLS FOR EVERY SERVICING NEED

Stock No.	Type	Description	Oz.	EA.
26 A 1021	5000	Alignment screwdriver	3	.46
26 A 3122	5003	RCA coil, pushbutton screwdriver	3	.58
26 A 3123	5004	Delrin all-wave set aligner	3	.48
26 A 1015	5097	K-Tran and IF aligner	3	.76
26 A 1020	8195	Channel tuning tool	3	.78
26 A 2496	8271	Stackpole stud-type core aligner	3	.66
26 A 1014	8275	Zenith universal aligner	3	.57
26 A 1011	8276	Short Duplex aligner	3	.57
26 A 2497	8277	2⅝″ duplex aligner	3	.57
26 A 1013	8282	Zenith .100 hex wrench and aligner	3	.37
26 A 3124	8605	Capacitor/tuner hex and screwdriver	3	.63
26 A 1010	8606	Zenith-Admiral Delrin hex wrench	3	.48
26 A 3125	8721	9″ standard/thin stud aligner	3	.78
26 A 1019	8722	7″ duplex #4 and #6 stud aligner	3	.65
26 A 1017	8728	12″ fiberglass screwdriver	3	.54
26 A 1016	8728A	7″ Delrin plastic screwdriver	3	.42
26 A 3655	8867	#4 and #6 I.F. stud aligner	6	1.05
26 A 3656	8868	Dual blade alignment screwdriver	6	1.05
26 A 3657	8869	Double ended hex aligner	6	1.05
26 A 3126	8987	7″ blade plastic screwdriver	3	.67
26 A 2499	8988	12″ plastic screwdriver	3	.97
26 A 2492	8989	16″ blade plastic screwdriver	3	1.20
26 A 1012	9091	.125″ hex nylon wrench	3	.48
26 A 1217	9293	12″ fiberglass alignment stick	12	.47
26 A 3658	9294	16″ fiberglass alignment stick	12	.73
26 A 3128	9295	11″ long Delrin .100 hex	3	.67
26 A 1008	9296	11″ long nylon .075 hex	4	.66
26 A 3129	9300	.075 hex coil slug and alignment	3	.48
26 A 1164	9302	5⅜″ Magnavox hex core aligner	4	.48
26 A 3130	9380	Hex driver for CTS type controls	3	.75
26 A 3659	9440	Transistor IF core aligner	12	.63

Chemicals and Servicing Tools

The RAPID Electroplater
HOME FACTORY INSTITUTION

Complete Kit
for Quick and
Easy Plating

RAPID ELECTROPLATING KITS

easy electroplating of small metal cts. Each kit includes: 1-oz. metal ner; 1-oz. metal polish plating com- nd; ⅝″ brush; wires and clips; polishing . Order batteries, below—uses two No. ½-volt. Shpg. wt., 1 lb.

ck No.	Type	Compound	EACH
A 1076	200	Nickel	2.49
A 1077	202	Cadmium	2.49
A 1079	204	Copper	2.49
A 1080	205	Brass	2.49
A 1088	206	Silver	3.19
A 1089	207	24K Gold	5.29

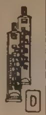
A 5641. Batteries. Wt., 2 lbs. . . Each .99¢

COLOR CLEAR
A

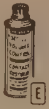
G-C 8890 COLOR CLEAR COL- OR TV TUBE CLEANER. Stops and dust buildup—keeps ure tubes sparkling clear. Acts anti-static agent—prevents trostatic dust accumulation. . spray can. Shpg. wt., 10 oz.
A 1120. . . . . .99¢

CHEMTRONICS "TUN-O-LUBE" TUNER CLEANER. An activated tuner cleaner used by service- to clean and lubricate all es of tuners. Helps quiet noise sed by dirty contacts. 8-oz. y can. Shpg. wt., 1 lb.
A 2270. . . . . .1.69

G-C 8888 "SPRA-LUBE" COLOR- TV TUNER CLEANER. Cleans ation and dust, leaving a t coating for lubrication. With point extension spray. 8-oz. y can. Helps quiet noise. Shpg. 12 oz.
A 3135. . . . . .1.95



D **G-C "SUPER GRIP" EPOXY GLUE.** Used by NASA. Won't shrink or expand. Resists acids, alkali, grease, gas, water, etc. High electrical resistance. Hardens in 2-4 hours at room temp. Kit of 2-tubes (approx. 4 oz.). Shpg. wt., 6 oz.
26 A 3650. . . . . 2.50


NO NOISE VOLUME CONTROL CONTACT RESTORER
E

E **"NO NOISE" CONTACT RE- STORER.** Cleans, lubricates and restores volume controls, band switches, relays. Won't harm precious metals. Does not change capacities. 6-oz. spray can. Shpg. wt., 8 oz.
26 A 3651. . . . . .2.25

COLOR LUBE
F

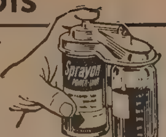
F **CHEMTRONICS COLOR LUBE.** Color TV tuner cleaner. Perfectly safe for any color TV. Will not detune tuners. Cleans, lubricates in one operation. Safe for plastics. Non-flammable. 8-oz. spray can. Wt., 10 oz.
26 A 3652. . . . . .2.39

G **"NO NOISE" TUNER CLEAN- ER.** Cleans and lubricates TV tuner controls, contacts and switches. Eliminates noise caused by dirty components. Spray can contains 6 fluid oz. Shpg. wt., 14 oz.
26 A 2397. . . . . .2.20

RELAY KLEEN
H

H **GC 8682 "RELAY KLEEN" CON- TACT CLEANER.** For cleaning relays and contacts. Also a good solvent for all electrical and mechanical equipment. Non-flammable, no residue. With pin-point spray extension for hard-to-reach places. 6-oz. spray can. Shpg. wt., 14 oz.
26 A 3131. . . . . .1.89

JET-PAK SPRAY OUTFIT



198

Sprays up to 32 oz. of any liquid. Uses gas power-cartridge. Includes head assembly, 4-oz. glass jar, 15-oz. power unit. Shpg. wt., 1½ lbs.
26 A 1638. . . . . .1.98
26 A 1640. 15-oz. Power Unit. 1 lb. .1.20
26 A 1642. Extra Jar. 5 oz. . . . . .13¢

J **QUIETROLE CLEANER.** Cleans controls, switches, relays and other devices. Eliminates noise. With dropper applicator. 2-oz. bottle. Shpg. wt., 4 oz.
26 A 1090. . . . . .1.69

Jif CLEANS CONTACTS
K

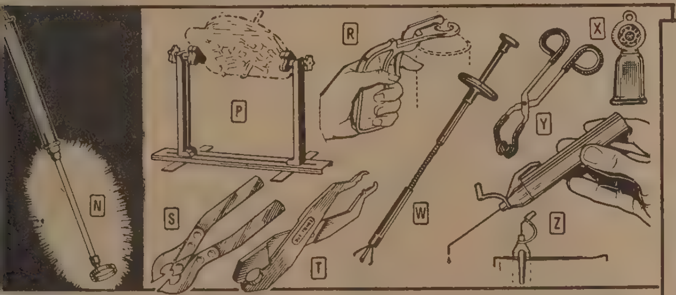
K **G-C 8670 "JIF" CONTACT AND CONTROL CLEANER.** Cleans and lubricates contacts, controls, switches. Eliminates noise caused by dust. Contains silicone for effectiveness. Non-flammable. 6-oz. spray can. Shpg. wt., 10 oz.
26 A 3133. . . . . .1.79

FREEZE MIST
L

L **G-C 8668 "FREEZE MIST" CIR- CUIT COOLER.** Cools components so you can spot bad capacitors and transistors, oxidized joints. With pinpoint spray extension for hard-to-reach places. 6-oz. spray can. Shpg. wt., 10 oz.
26 A 3134. . . . . .1.26

SPRA KLEEN
M

M **G-C "SPRA-KLEEN" CONTACT CLEANER.** Lubricates contacts, controls, relays, switches. Stops volume control noise. No harsh solvents, won't harm plastic. 6- oz. spray can. Shpg. wt., 10 oz.
26 A 1075. . . . . .97¢



G-C 8725 ILLUMINATED INSPECTION MIR- ROR. Anod. alum.; 6″ lucite rod, 1″ hinged ror. Less penlight cells. 12¼″. 6 oz.
A 1007. . . . . .1.97
A 5870. Burgess "Z" Cell. 1½-volt cell for ve. Uses two. 3 oz. . . . .Pkg. of 2 for 20¢

G-C 5212 CHASSIS CRADLE. Rotates 360° to lock radio or TV chassis at best king angle. Makes any part of chassis lly accessible. 14″ high, adjustable to 24″ e. 12½″ deep. Shpg. wt., 7 lbs.
A 3710 X. 7.95

G-C 5900 SPRAY CAN HANDLE. Converts any spray can to spray gun. Keeps hands n; eliminates hand fatigue. 2 oz.
A 1178. . . . . .48¢

G-C 8872 C-RING TOOL. Removes, inserts "C" washers, retainers. 2 oz.
A 1253. . . . . .1.84

G-C 9356 FUSE PULLERS. Nylon tongs at each end for miniature and industrial s, from 3/16″ to 1″ dia. Also fits domestic w-in type. Shpg. wt., 1 oz.
A 1177. . . . . .87¢

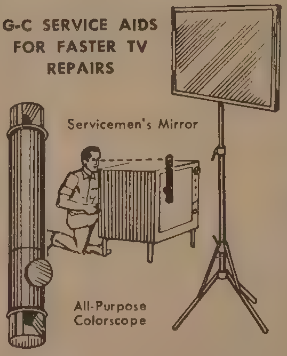
W **G-C 5089 PICKUP TOOL.** Push button to open claws—release to close. Flexible 14″ shaft. Shpg. wt., 4 oz.
26 A 1741. . . . . .1.15

X **G-C 9130 TUBE GADGET.** 3 tools in one. Straightens 7 or 9-pin miniature tube pins; also can be used for pulling tubes. Shpg. wt., 3 oz.
26 A 1003. . . . . .1.65

Y **G-C HOT TUBE PULLERS.** Puts an end to burned fingers and dropped tubes. Special plastic coating insulates handles and tips—assures firm, cool grip. Straight model for open work. Right angle model for tight or enclosed areas.
26 A 3653. Straight Model. 6 oz. 1.73
26 A 3654. Right Angle Model. 6 oz. . . .1.88

Z **WALSCO REACH-ALL PEN OILER.** Pocket size precision instrument oiler. Has .035″ stainless steel tube that extends up to 9½″; lubricates hard-to-reach spots without disassembly. Dispenses drop or fraction of drop of fine oil. Transparent, refillable container comes filled. 5″ long. Pocket clip, tube guard. Shpg. wt., 3 oz.
26 A 1165. . . . . .89¢

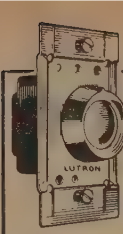
G-C SERVICE AIDS FOR FASTER TV REPAIRS



G-C 8381 SERVICEMEN'S MIRROR Super deluxe mirror is a must for TV servicemen. Made of unbreakable plexiglass with special swivel mount. Can be adjusted to old set height and to low boy height. Complete with stand. Size, 10x12″. Wt., 3 lbs.
26 A 1061. . . . . .11.45

G-C 9454 COLORSCOPE Attaches easily to picture tube safety glass or tube face. Takes only minutes to static converge any color TV easily and accurately. Power optic magnifier enables brilliant viewing of the Red, Blue and Green Tricolor dot pattern. Makes precise adjustments a convenient and fast operation. Wt., 2 lbs.
26 A 1725. . . . . .7.95

Electrical Accessories for Home and Shop



LUTRON SOLID-STATE LIGHT DIMMERS

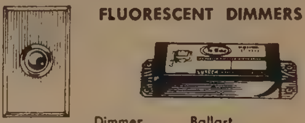
Replaces Standard 2-Way Light Switch

5.98 Saves Bulbs

Lets you adjust intensity of light to fit every requirement. Adjust for reading, TV watching, to provide a party atmosphere, etc. Simply turn the knob for desired light level. Push the knob to turn lights on or off; does not disturb intensity setting. Easy to install; replaces any standard 2-way light switch. Controls up to 600 watts of incandescent lighting. Must be used with a minimum of 40 watts. Solid-state design assures long life and top performance. Silicon transistors withstand high current and inverse voltage surges. Shpg. wt., ½ lb.
26 A 1510........................5.98

3-WAY ELECTRONIC DIMMER CONTROL. Same features as above, but replaces 3-way switch. Wt., ½ lb.
26 A 3013........................11.95

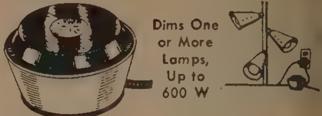
FLUORESCENT DIMMERS



MODEL T-14 DIMMER. Easy-to-install fluorescent dimming system; only 2 connections to dimmer. Gives you a 500:1 dimming ratio. Controls 4 to 14 40-watt rapid-start fluorescent lamps. Lets you adjust intensity of light to fit every requirement. Simply turn knob for desired light level. Built-in minimum illumination control, adjusts simply and quickly. Has rotary positive on-off switch. Dimmer installs in any single-gang wall box. Use for new installations or to convert existing installations. Order ballast below.
26 A 1902. Shpg. wt., 1 lb..........17.98

MODEL T-8 DIMMER. Above, for 1-8 lamps.
26 A 3289. Shpg. wt., 8 oz..........12.95

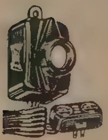
MODEL BT-1 BALLAST. 1 per 40-watt lamp.
26 A 3298. Shpg. wt., 2 lbs..........6.95


Dims One or More Lamps, Up to 600 W

FINGERTIP REMOTE CONTROL

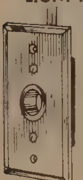
Flatter your rooms with the soft glow of muted light. Decorator-styled Lutron Dim-liter lets you decorate with light. You can brighten a corner, dramatize a furniture grouping, or highlight a painting by dimming or raising the light-level at will. For use in living room, dining room, den, bedroom, nursery, dinette, office, anywhere! Gives you continuous control of one or more lamps, up to 600 watts, incandescent. Saves electricity, too. A concealed glow-light helps you find switch in dark. Cork bottom protects furniture finish. 6′ cord with plug. Use multiple-plug to control more than one lamp. 117 VAC. Wt., 1½ lbs.
26 A 3752........................9.95

EAGLE "LIGHT-A-MATIC" LIGHT CONTROLS



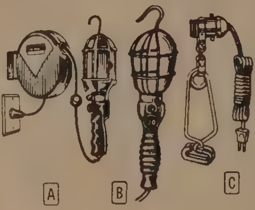
INDOOR UNIT. Turns on lights at dusk and shuts them off at dawn. Place control facing outdoor natural light, plug it into outlet, and plug lamps into unit. Sealed case, 2⅝x1¾x1⅜″. 8-ft. cord, plug. 875 W incandescent or 500 W fluorescent. 110-125 V, 50-60 Hz AC. Shpg. wt., 1 lb.
26 A 1839........................5.95

"LIGHT-A-MATIC" OUTDOOR UNIT



Handles 125-volt AC incandescent loads up to 1000 watts or fluorescent to 500 watts. Fits Gem Box, "T" box, and FS box. 2⅝x1¼x1⅛″ deep. With stainless steel plate, mounting screws, rubber gasket, and three 8-in. leads, ready to connect to the source to be controlled. U.L. Listed.
26 A 1438. Wt., ¾ lb..........8.95

TROUBLE LAMPS AND CLAMP-ON LIGHT

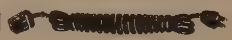


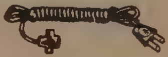
A **CORDOMATIC 500.** Light and reel with 20-ft. heavy-duty cord. Pulls out easily. Locks, retracts automatically. Reel wall-mounts for 180° swivel, ceiling-mounts for 360°. Handle outlet. With mtg. hardware. 117 VAC.
26 A 3190. 3¾ lbs..7.95

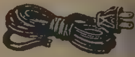
26 A 3191. Model 500G. Above, but with 3-wire grounded outlet.....9.95

B **TROUBLE LAMP.** Rated t 600 watts, includin bulb. 2 outlets in handle. 50 cord. Less bulb. 117 VAC
26 A 1947. Wt., 3 lbs. 2.9
26 A 1946. Above with 25 ft. extension cable....2.4

C **CLAMP-ON LIGHT** Clamps on chair, bed post. Vinyl-covered clamp won't mar finish. Swivel to any angle. Less bulb.
26 A 2585. Wt., 1 lb...1.1

D 

E 

F 

D VINYL EXTENSION CORDS

Have vinyl plug on one end and flat vinyl 3-way receptacle on other. Vinyl-covered No. 18 wire.

Stock No.	Ft.	Color	Wt.	EACH
26 A 2232	9	Brown	4 oz.	.41
26 A 2233	9	Ivory	4 oz.	.43
26 A 2230	6	Brown	3 oz.	.33
26 A 2231	6	Ivory	3 oz.	.36

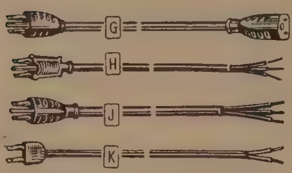
E TV "CHEATER" LINE CORD

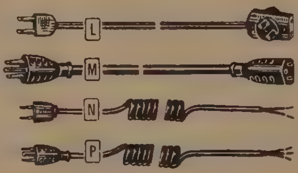
Permits using set with back cover removed 6′ 2-conductor, vinyl-covered. Plastic plug.
26 A 1944. Shpg. wt., 1 lb.............37

F REPLACEMENT CORDS

6′, plastic, plug, end-stripped. 10 oz.
26 A 2551. Ivory........................21
26 A 2550. Brown........................21
26 A 2020. Black........................21

BELDEN ELECTRICAL CORDS





G QUALITY HEAVY-DUTY EXTENSION CORDS

Have molded 3-prong plug at one end and molded 3-prong receptacle at other end. 3-conductors. Yellow vinyl cover. U.L. Listed. *In table indicates gauge.

Stock No.	Mfr's Type	Ft.	*	Lbs.	EACH 1-9	EACH 10-Up
26 A 2181	17491	25	18	2½	2.32	2.07
26 A 2182 X	17492	50	18	3½	4.26	3.80
26 A 2183 X	17493	100	18	9	7.76	6.94
26 A 2184	17494	25	16	2	2.72	2.43
26 A 2185 X	17495	50	16	4½	5.36	4.79
26 A 2186 X	17497	100	16	7	9.60	8.58
26 A 2187	17694	25	14	5½	5.70	5.09
26 A 2188 X	17695	50	14	10	10.02	8.95
26 A 2189 X	17697	100	14	19½	18.32	16.37

3-CONDUCTOR CORDS

Types 17236, 17238 and 17237 are for small tools, business machines, instruments. Others for sanders, grinders, saws, polishers requiring grounding. *Gauge. Black except, †gray. Letters in Type No. indicate cordage. U.L. Listed. Av. shpg. wt., 8 oz.

Stock No.	Mfr's Type	Fig.	Ft.	*	EACH 1-9	EACH 10-Up
26 A 2872	17236-SV	H	6	18	.76	.69
26 A 2873	17238-SV	H	8	18	.88	.79
26 A 2874	†17237-SVT	H	6	18	.69	.61
26 A 1930	17408-SJ	J	8	18	.94	.84
26 A 2875	†17407-SJT	J	8	18	.86	.77
26 A 2876	17409-SJO	J	8	18	.86	.77
26 A 2877	17419-SJ	J	9	16	1.25	1.12

2-CONDUCTOR VINYL LINE CORDS

Type 17106, 17109 for lamps, radios, smal appliances. Molded plug one end; other en stripped. Type 17156 is a 3-way cube ta cord. All are brown. Letters in Type No indicate cordage. *Gauge. U.L. Listed. Av shpg. wt., 4 oz.

Stock No.	Mfr's Type	Fig.	Ft.	*	EACH 1-9	EACH 10-Up
26 A 2854	17106-SPT	K	6	18	.35	.31
26 A 2855	17109-SPT	K	9	18	.45	.40
26 A 2856	17156-SPT	L	6	18	.46	.41

3-CONDUCTOR POWER CORDS

For electrical equipment having a built-i receptacle with blades and grounding pi Can also be used as extension cord wit devices requiring ground. Black rubber wit vinyl connectors. U.L. Listed. Wt., 2 lbs.

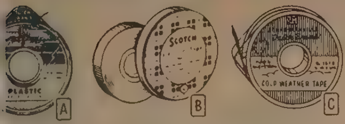
26 A 2895	17460	M	10	18	1.30	1.16
26 A 2896	17461	M	10	16	1.49	1.33

RETRACTABLE POWER CABLES

Stay neat . . . allow free movement of appli ance or tool. 6-ft. length retracts to 12″ 12-ft. to 24″. Black. U.L. Listed. Letters i Type No. indicate cordage. Av. wt., 1 lb.

26 A 2878	17249-SVO	N	6	18	1.23	1.10
26 A 2879	17447-SJO	P	6	18	1.62	1.44
26 A 2880	17449-SJO	P	12	16	2.61	2.33

Electrical Accessories for Home and Shop



] C DUTCH PLASTIC ELECTRICAL TAPE

g black vinyl. A-7, .007"; 130, .010"; 167, ", usable—10° F to +176° F. 6 oz.

3614. Type A-7. ¾"x44"........Per Roll 86¢
3623. Type 130. ½"x108"..... Per Roll 1.56
3671. Type 167. ¾"x60"........Per Roll 1.33

DUTCH FRICTION ELECTRICAL TAPE

h fabric base. Sticks tight, protects against or weather. Resists 1800 V. 7 oz.

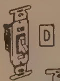
2486. No. 4. ¾"x30'..............Per Roll 29¢
3612. No. 8. ¾"x60' .... Per Roll 58¢
3620. D48200. ⅜"x60'....... ...Per Roll 27¢

B SCOTCH PLASTIC ELECTRICAL TAPE

k pressure-sensitive vinyl plastic. No. 33. '; No. 88, .0085", all-weather tape. 6 oz.

3699. No. 33. ¾"x44'...........Per Roll 94¢
2512. No. 33. ¾"x66' ....Per Roll 1.39
3700. No. 88. ¾"x66' ....Per Roll 1.69

AGLE SWITCHES AND RECEPTACLES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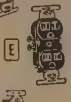
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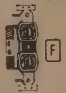
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UIET SWITCH. 15 A, 120 VAC. .L. Listed. C.S.A. Approved. . wt., 4 oz.

2528. Brown—Single Pole 39¢
2529. Ivory—Single Pole..43¢
3000. Brown—3-Way.....65¢
3001. Ivory—3-Way......69¢

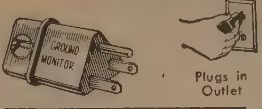
-WIRE DUPLEX RECEPTACLE. 15 , 125 V. U.L. Listed. Screw s terminals. Shpg. wt., 4 oz.

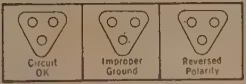
3006. Brown.................34¢
3007. Ivory...................38¢

UPLEX FLUSH WALL RECEPTACLE. 5 A, 125 V. U.L. Listed. 4 oz.

3008. Brown..................23¢
3009. Ivory..................27¢

DEARBORN 3-WIRE GROUND AND POLARITY TESTER



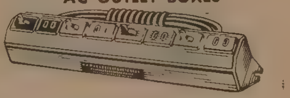


5.95
- Quick, Easy Test
- Assures Your Safety

"CIRCUIT GUARD." Tests for proper ground and polarity at 115-V 3-wire power outlets. Lights indicate Circuit OK, Improper Ground, Improper Neutral, Reversed Polarity, Reversed Ground and Power, No Power. Checks frame ground of travel trailers. Wt., 8 oz.

26 A 3670 .... 5.95

CBC HEAVY-DUTY COMPACT AC OUTLET BOXES



Very useful quality-constructed heavy-duty AC outlet boxes. Being short, they fit easily into small areas. Rated 15 amps at 115 volts. Size, 13x2¼x1½", except MO-3, 5x2x1¼". On-off switch. MO types have pilot lights. Fused or circuit breaker. Brown hammertone finish. *Four individually switched outlets. †3-wire.

CIRCUIT-BREAKER OUTLET BOXES

Stock No.	Mfr's Type	Outlets	Wt., Lbs.	EACH
26 A 2197	†MO-GD-CB	6	2¼	10.29
26 A 2198	MO-CB	6	2¼	8.57
26 A 2199	*SS-CB	4	2¼	8.57

FUSED OUTLET BOXES

26 A 1948	†MO-GD	6	2¼	7.95
26 A 1949	MO	6	2¼	6.25
26 A 1950	*SS	4	2¼	6.25
26 A 1951	MO-3	3	1½	3.75

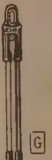
ELECTRICAL ACCESSORIES

G EAGLE "DETECTO-LITE" TESTER. Tests power lines from 90-600 volts. Detects live or ground wire. Safety pocket-clip.
26 A 3688. Wt., 3 oz. **44¢**

H DEFLEX GROUNDING PLUG. Lets you operate 3-wire appliances from 2 or 3-hole outlets without adapter. Button on plug deflects grounding blade for 2-hole outlets. Tension spring holds blade against metal faceplate.
26 A 3066. Wt., 3 oz. **79¢**

J EAGLE 526 CARBON MOTOR-BRUSH KIT. Assortment of 104 brushes, 15 copper springs. Exact replacement in a wide variety of vacuum cleaners, appliances, other fractional horsepower motors.
26 A 3674 Wt., 1 lb. **4.98**

K EAGLE 642 POCKET-TYPE FUSE PULLER. Rated 200A at 250V, 100 A at 600V. Blade clamp for adjusting clips that have spread. Size, 1⅜x7½".
26 A 3673. Wt., 3 oz. **79¢**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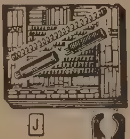
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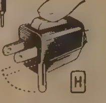
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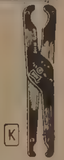
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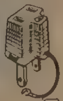
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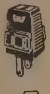
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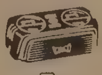
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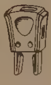
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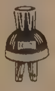
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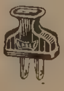
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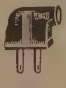
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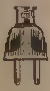
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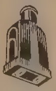
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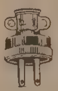
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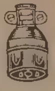
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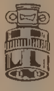
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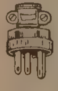
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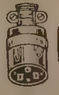
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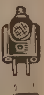
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VALUES IN SELECTED ELECTRICAL WIRING ACCESSORIES FOR THE HOME

EAGLE BAKELITE GROUND ADAPTER. Heavy duty double wipe contacts. For necting 2-wire system to 3-wire parallel de and U-ground. 3¾" grounding lead. . Listed. 15 amp @ 125 V. Wt., 2 oz.
A 3669..............................28¢

EAGLE PARALLEL GROUND ADAPTER. Gray vinyl; will not crack. Double wipe tacts. Connects 2-wire system to 3-wire allel U-ground. Duplex receptacle acts two. Grounding lead has "C" lug. . Listed. 15 amp @ 125 V. Wt., 2 oz.
A 3729 ....23¢

EAGLE VINYL CUBE TAP. 3 easy-to-get-at outlets. Brass spring prongs. 15 amp @ V. U.L. Listed. Shpg. wt., 2 oz.
A 3724 ....22¢

EAGLE BAKELITE TRI TAP. 3 taps. 15 amp @ 125 V. U.L. Listed. Shpg. wt., 2 oz.
A 2545...............................23¢

EAGLE JIFFY PUSH-PULL PLUG. With brass spring prongs. 15 amp @ 125 V. U.L. sted. Shpg. wt., 2 oz.
A 2542 ....9¢

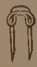
EAGLE FLEXIBLE SPRING PRONG RUBBER HANDLE CAP. 15 amp @ 125 V. U.L. sted. With fibre washers. 2 per pkg. pg wt., 2 oz.
A 3721 ....Pkg. of 2 for 29¢

T EAGLE FLAT BAKELITE HANDLE CAP. Brass spring prongs. U.L. Listed. 15 amp @ 125 V. Pkg. of 2. Shpg. wt., 4 oz.
26 A 3723..................Pkg of 2 for 23¢

W EAGLE FLAT RUBBER CAP WITH SIDE OUTLET. With brass prongs. Wiring completely enclosed. 15 amp @ 125 V. U.L. Listed. Shpg. wt., 4 oz.
26 A 3722..................Pkg. of 2 for 33¢

X EAGLE FLAT RUBBER CAP. Binding screws won't touch even when stepped on. Brass prongs. 15 amp @ 125 V. Use with Fig. Y. U.L. Listed. Wt., 4 oz.
26 A 3725..................Pkg. of 2 for 29¢

Y EAGLE FLAT RUBBER CORD CONNECTOR. Female contacts. 15 amp @ 125 V. U.L. Listed. Shpg. wt., 2 oz.
26 A 3727.................................38¢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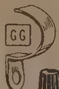
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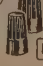
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FF INSULATED COPPER STAPLES. For holding wiring in place. Off-white insulation. Boxes of 50. 7 oz.
26 A 1914. ³⁄₁₆x½". Box of 50 for 22¢
26 A 1915. ³⁄₁₆x¾". Box of 50 for 22¢

GG G-C CABLE CLAMPS. Nickel-plated. #6 mtg. hole. 25 per pkg. except *20. †15 per pkg. Wt., 4 oz.

Stock No.	Type	Fit	PKG.
26 A 2215	H502F	⅛" to ³⁄₁₆"	.39
26 A 2216	H503F*	³⁄₁₆" to ¼"	.39
26 A 2217	Z7243†	¼" to ⁵⁄₁₆"	.39
26 A 2218	H506F†	⁵⁄₁₆" to ½"	.39

Z EAGLE LARGE RUBBER HANDLE CAP. 15 A @ 125 V. U.L. Listed. Wt., 2 oz.
26 A 3728...................................23¢

AA EAGLE RUBBER CORD CONNECTOR. 15 A @ 125 V. U.L. Listed. Wt., 2 oz.
26 A 3603...................................35¢

BB EAGLE RUBBER CONNECTOR. 15 A @ 125 V. U.L. Listed. Shpg. wt., 2 oz.
26 A 3726...................................38¢

CC EAGLE PARALLEL GROUND RUBBER HANDLE CAP. 15 A @ 125 V. Wt., 2 oz.
26 A 3717. U.L. Listed.....................45¢

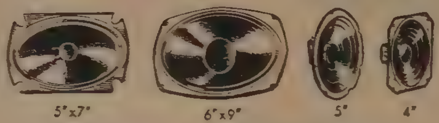
DD EAGLE PARALLEL GROUND RUBBER CONNECTOR. 15 A @ 125 V. Wt., 2 oz.
26 A 3718. U.L. Listed ....89¢

EE FUSED PLUG. Takes 2-3AG fuses (not supplied.) U.L. Listed. Wt., 3 oz.
26 A 3648 ....37¢

HH PHENOLIC-TYPE SOLDERLESS WIRE CONNECTORS. Extremely handy; requires no tools; all you have to do is strip two ends, push them into connector, and screw cap down. Wire cannot be pulled out after being inserted into connector. U.L. Listed. Av. shpg. wt., pkg. of 2, 4 oz.

Wire Size	Stock No.	PKG. OF 12
16-18	26 A 3701	.15
14-18	26 A 3702	.19
12-18	26 A 3703	.28

Allied® Extra-Value Replacement Speakers

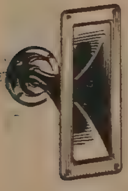


GENERAL-PURPOSE REPLACEMENT SPEAKERS

- For Universal Replacement Use
- Built to EIA Standard Dimensions
- Rigid Frame Assures Alignment
- Ruggedly Constructed
- Precision-Centered Elements
- Dust-proofed Coils

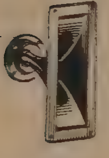
Top-quality permanent magnet speakers at very low prices. Designed for replacement use in all types of music systems, or with new equipment. Ruggedly constructed throughout—to exacting EIA standards. Rigid frame assures permanent alignment of parts, assures longer service, better reproduction. Magnet and voice coil are precision centered for efficient, distortion-free sound. Dustproofed coils for longer life and reliability. Impedance, 3.2 ohms, except †, which indicates 8 ohms impedance. *Indicates extended-range speaker. PC indicates pincushion shaped basket.

Stock No.	Size	Shape	Mag. Oz.	Max. Watts	Wt., Lbs.	EACH
16 A 3476	4"	Square	.68	3.0	½	1.59
16 A 3477	5"	PC	.68	3.5	¾	1.89
16 A 3472	5x7"	Oval	1.0	5.0	1	2.39
16 A 3471	6x9"	Oval	1.47	8.0	1¼	2.69
16 A 3493	*6x9"	Oval	1.47	8.0	1¼	2.89
16 A 3416	†6x9"	Oval	1.47	8.0	1¼	2.79
16 A 3470	8"	PC	2.15	9.0	1½	2.79
16 A 3542	†8"	PC	2.15	9.0	1½	2.79
16 A 3529 X	12"	Round	3.16	10.0	3¾	4.99



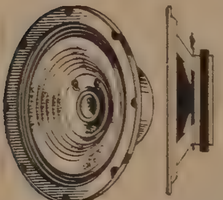
4x10" MIDRANGE HORN

Die-cast midrange horn for replacement use or modernization of existing equipment. Adds startling realism to most speaker systems. Reinforces middle-range frequencies for fuller, richer sound. High sensitivity for increased "presence," wide dispersion angle for uniform distribution. Frequency response: 600-12,000 Hz. Handles 30-watt program peaks with proper crossover. Mounting flange, 10½x3$\frac{15}{16}$". Depth 11". 8 ohms impedance. Complete with capacitor crossover. Shpg. wt., 3 lbs.
16 A 3540............................7.95



2x6" COMPRESSION TWEETER

Efficient design provides wide-angle dispersion for good sound reproduction. Built-in crossover capacitor simplifies installation. Response: 2000-18,000 Hz. Employs 1.4-oz. magnet, with ¾" voice coil. Power capacity, 30 watts. Impedance, 8 ohms. Shpg. wt., 1¾ lbs.
16 A 3539............................6.95



BIG-VALUE HEAVY-DUTY REPLACEMENT SPEAKERS

- Constructed with Heavy Ceramic Magnet Assemblies
- Moisture-Resistant Cone
- Rigid, Extra-Strong Frame
- Rugged, Baked Enamel Finish
- Epoxy Bonds Between Cones and Voice Coils

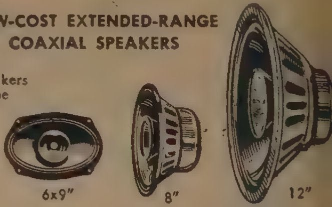
Allied's own brand of high-quality permanent-magnet replacement speakers are priced at exceptionally low cost. All have large precision centered magnets and voice coils for better tonal quality with plenty of power handling capacity. Mount easily in hard-to-get-at locations such as wall, ceiling, narrow speaker baffles, etc. Moisture-resistant treated cone. Rigid frame assures permanent alignment of voice coil and other moving elements. 8-ohm impedance. Baked-on enamel finish. PC, pincushion shape.

Stock No.	Type	Size	Shape	Magnet Oz.	Shpg. Wt.	EACH
16 A 3404	4BC	4"	Square	1.0	¾ lb.	4.75
16 A 3408	5BC	5"	PC	1.0	¾ lb.	4.95
16 A 3409	6EC	6"	PC	3.0	1 lb.	5.50
16 A 3410	8FC	8"	PC	5.5	1¾ lbs.	5.95
16 A 3411 X	12JC	12"	Round	10.0	3¾ lbs.	9.95
16 A 3412	57EC	5x7"	Oval	3.0	1¼ lbs.	5.50
16 A 3413	69JC	6x9"	Oval	10.0	2½ lbs.	6.95

LOW-COST EXTENDED-RANGE COAXIAL SPEAKERS

These Two-Way Speakers Offer Top-Dollar Value

For Low-Cost Music Systems or Extension Speakers



Ideal for use in low-cost music systems or as extension speaker
Provide clear highs and smooth, undistorted lows. Feature heav
duty 1" voice coils, except 6x9" size, ¾". Impedance, 8 ohms.

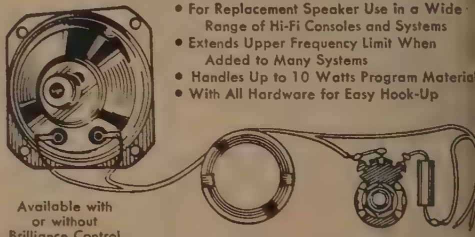
16 A 3551 X. 12" Coaxial Speaker. Woofer has 6-oz. magnet;
tweeter has .68-oz. magnet. 40-15,000 Hz response, crossover
2500 Hz. Power capacity, 15 watts. Shpg. wt., 5 lbs..........8.9

16 A 3552. 8" Coaxial Speaker. Woofer has 3-oz. magnet, tweete
has .68-oz. magnet. 50-13,000 Hz response, crossover at 3000 H
Power capacity, 9 watts. Shpg. wt., 6 lbs....................6.9

16 A 3554. 6x9" Coaxial Speaker. Oval speaker with 3-oz. magne
3" tweeter has .68-oz. magnet. 50-15,000 response, crossover at 300
Hz. Power capacity, 8 watts. Shpg. wt., 1½ lbs.............6.9

ADD-ON TWEETER AND CROSSOVER EXTENDS RESPONSE OF YOUR PRESENT 8-OHM SPEAKER

- For Replacement Speaker Use in a Wide Range of Hi-Fi Consoles and Systems
- Extends Upper Frequency Limit When Added to Many Systems
- Handles Up to 10 Watts Program Materia
- With All Hardware for Easy Hook-Up



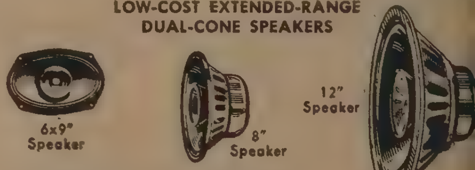
Available with or without Brilliance Control

Add-on tweeters, ideal for use as replacement speakers in many h
fi consoles or to expand the frequency range of your present 8-oh
speakers. Greatly improves the sound of your system, provid
crisp, sparkling high frequencies. Each unit is equipped with cros
over to properly channel high frequencies to tweeter for excelle
sound reproduction. Increases response to 13,500 Hz. Handles up
10 watts program material. Rugged construction for long life an
dependable operation. With all hardware for easy installation.

16 A 3475. Model TSP35A-X. 3½" tweeter has crossover to separa
high frequencies for excellent sound response. Mounts easily
any installation. Shpg. wt., 2 lbs.............................3.9

16 A 3479. Model TSP35A-XC. 3½" tweeter and crossover as abov
but also includes brilliance control for precise adjustment of high
frequencies. Shpg. wt., 3 lbs.................................4.9

LOW-COST EXTENDED-RANGE DUAL-CONE SPEAKERS



- Heavy-Duty Voice Coil for Reliability
- Separate VHF Cones Extend Highs
- Rigid Frame Assures Alignment

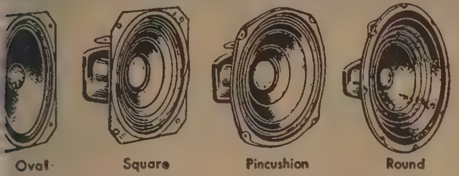
Perfect for extension speakers or for low-cost music systems f
family or play room. Offers extended response with clear highs a
smooth low frequencies. Whizzer cone acts to reinforce higher fr
quencies. Rigid frame assures alignment of voice coil and oth
moving elements. Internal dust cap protects heavy-duty voice coil
extends life of speaker. Husky ceramic magnet drives dual-co
Impedance, 8 ohms.

Stock No.	Type LC	Size	Shape	Mag. Oz.	Wt., lbs.	EAC
16 A 3419	57EC-W	5x7"	Oval	3.0	1¼	3.95
16 A 3423	69JC-W	6x9"	Oval	10.0	2½	5.49
16 A 3428	8JC-W	8"	Round	10.0	2¾	5.49
16 A 3431 X	12JC-W	12"	Round	10.0	4	7.45

Speakers by Quam, ERA, Utah and Misco

BUY TWO AND SAVE 10%

UAM GENERAL-PURPOSE REPLACEMENT SPEAKERS



e Alnico V magnets, baked-enamel finish. *Very shallow frame. edance: 3.2 ohms, except †8 ohms; ‡8-10 ohms; §12 ohms; #100 s. "PC", pincushion design. **High energy Q/8 magnet.

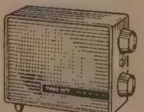
tock No.	Mfr's Type	Shape	Size	Cap., W	Mag. Oz.	Wt., Lbs.	EA.	TWO for
3424†	22A06Z8	Round	2¼"	.25	.45	¼	3.00	5.40
3425#	22A06Z100	Round	2¼"	.25	.45	¼	3.30	5.94
3422	25A07	Square	2½"	1.5	.65	¼	2.28	4.10
3426§	27A06Z12	Round	2¾"	.25	.55	¼	2.97	5.35
3485	30A05	Square	3"	2.0	.55	¼	1.98	3.56
3453	3A07	Square*	3½"	2.5	.65	½	2.43	4.37
3417	4A05	Square*	4"	2.5	.55	¼	1.74	3.13
3561	26A07	Oval*	2x6"	2.0	.65	½	2.70	4.86
3421	35A05	Oval*	3x5"	2.0	.55	½	2.40	4.32
3435	4A1**	Square*	4"	3.0	1.0	¾	2.67	4.81
3436	4A15	Square	4"	3.0	1.47	¾	2.97	5.35
3433	46A1**	Oval*	4x6"	3.5	.65	¾	3.12	5.62
3438†	4A1Z8**	Square*	4"	3.0	1.0	¾	3.06	5.51
3461	46A15	Oval	4x6"	3.5	1.47	1	3.45	6.21
3427	48A2**	Oval*	4x8"	4.5	1.2	1	4.50	8.10
3484	410A2**	Oval*	4x10"	6.0	1.2	1¼	5.16	9.29
3441	5A1**	PC	5"	3.5	1.0	1	2.88	5.18
3439	5A15	PC	5"	3.5	1.47	1	3.18	5.72
3442†	5A1Z8**	PC*	5"	3.5	1.0	½	3.18	5.72
3405	52C10	PC	5¼"	10.0	10.0	2⅛	6.15	11.07
A 3446	57A15	Oval	5x7"	5.0	1.47	1	2.84	5.11
A 3447	57A21	Oval	5x7"	5.0	2.15	1¼	4.26	7.67
A 3445	6A31	PC	6½"	6.0	3.16	1½	4.77	8.59
A 3451‡	69A2Z10**	Oval	6x9"	8	1.4	1¼	5.01	9.02
A 3463	69A3	Oval	6x9"	10.0	3.2	1¾	5.58	10.04
A 3449	7A21	PC	7"	6.0	1.4	1	4.59	8.26
A 3443	8A21	PC	8"	7.0	2.15	1½	4.65	8.37
A 3444	8A31	PC	8"	9.0	3.16	2¼	5.49	9.88
A 3452	10C5	Round	10"	9	4.8	2¼	7.47	13.45
3533X	12A6	Round	12"	14.0	6.8	4½	9.96	17.93

45-OHM INTERCOM SPEAKERS

-quality PM speakers for replacement use in 45-ohm inter-s. *Very shallow frame. **High energy Q/8 magnet.

itock No.	Mfr's Type	Size	Shape	Mag.	Wt., Lb.	EA.	TWO for
A 3481	3A07Z45	3½"	Square*	.65 oz.	½	2.70	4.86
A 3482	4A1Z45**	4"	Square	.65 oz.	¾	3.06	5.51
A 3483	5A1Z45**	5"	Pincush.	.65 oz.	1	3.21	5.78

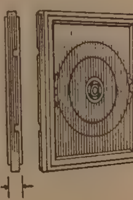
PERSONAL REMOTE SPEAKER



his speaker lets you enjoy good-quality ersonalized listening to your TV, radio or honograph. Excellent as an extension eaker, too. Two controls, one for the eaker, the other for the radio, TV, etc. asy to install, simply connect cable from our remote to speaker leads in your radio, V, or phonograph. Has attractive, high impact plastic case, x4x2". With 20-ft. cable. From Japan. Wt., 1 lb.

6 A 3515............................**Each 3.95 Two for 7.11**

ERA POLY-PLANAR WAFER-TYPE SPEAKERS

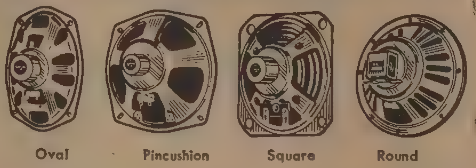


del G51. Wide-range electro-dynamic aker employs lightweight expanded poly-rene panel supported by a shallow plastic me. Reproduces frequencies from 60 Hz to 000 Hz. Large radiating area results in imum piston motion for low distortion l high electromagnetic efficiency. Provides nd not available from cone-type speakers. voice coil. 8 ohms. 5 watts peak. 4½x8½". x. depth, ¾". 19 oz.

A 3400. Each......7.95 Two for...14.50

A 3488. Model G201. As above, 40-20,000 20 watts peak. 11¾x4¹¹⁄₁₆". Max. depth, ". 19 oz.....**Each 14.95 Two for...26.90**

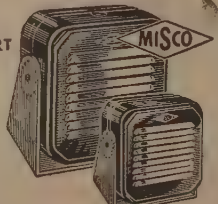
UTAH SHALLOW-PROFILE HIGH-EFFICIENCY SPEAKERS



Slim-profile speakers for general replacement use. Alnico V magnets provide gap flux density equaling or exceeding EIA standards. Give better response, fuller tone. Uses wafer-thin magnet and one-piece pot. All have 3-4 ohms impedance, except Types SP4YI8, SP69D8, SP8J8 and SP12J8, 8 ohms. Type SP25A is for use in transistorized circuits. PC in table indicates pincushion. *Indicates speaker has transformer mounting facilities. †Watts.

Stock No.	Mfr's Type	Shape	Size	W†	Depth	Mg. Oz.	Lb.	EA.	TWO for
16 A 3500	SP25A	Square	2½"	2	1⁵⁄₁₆"	.68	¼	2.37	4.27
16 A 3501	SP3A	Square	3"	3	1⅜"	.68	¼	2.28	4.11
16 A 3456	SP35A	Square	3½"	3	1⁹⁄₁₆"	.68	½	2.31	4.16
16 A 3457	SP4Y	Square	4"	4	1½"	.55	½	1.74	3.13
16 A 3489	SP4Y8	Square	4"	4	1½"	.55	½	1.86	3.35
16 A 3502	*SP4B	Square	4"	4.5	1¹¹⁄₁₆"	1.00	¾	2.58	4.65
16 A 3490	*SP4D	Square	4"	5	1²³⁄₃₂"	1.2	¾	2.70	4.86
16 A 3492	*SP5D	PC	5"	5.5	1²⁹⁄₃₂"	1.2	¾	2.91	5.24
16 A 3503	*SP5B	PC	5"	5	1⅞"	1.00	¾	2.61	4.70
16 A 3458	SP6A	PC	6"	6	2⅛"	.68	¾	2.97	5.35
16 A 3505	*SP6D	PC	6"	6.5	2⁹⁄₃₂"	1.47	¾	3.24	5.84
16 A 3507	*SP6FL	PC	6"	8	3"	3.16	1½	4.35	7.84
16 A 3459	SP8D	PC	8"	8	2¾"	1.47	1¼	3.48	6.26
16 A 3508	*SP8G	Round	8"	10	3⁹⁄₃₂"	3.16	2	5.40	9.72
16 A 3509	*SP8J8	Round	8"	12	4¹⁄₁₆"	6.8	3¼	6.66	11.96
16 A 3510X	*SP12J8	Round	12"	14	5⁷⁄₁₆"	6.8	4¾	7.95	14.28
16 A 3511	SP46A	Oval	4x6"	4	1²³⁄₃₂"	.68	½	2.70	4.68
16 A 3466	SP53Y	Oval	5x3"	4	1¹⁹⁄₃₂"	.55	½	2.34	4.22
16 A 3406	SP57A	Oval	5x7"	4.5	2¼"	.68	¾	2.91	5.24
16 A 3512	SP57D	Oval	5x7"	6.5	2⁹⁄₃₂"	1.47	1	3.33	6.00
16 A 3467	SP69B	Oval	6x9"	7.0	2²⁷⁄₃₂"	1.00	1	3.81	6.86
16 A 3513	SP69D	Oval	6x9"	7.5	2⅞"	1.47	1¼	3.90	7.03
16 A 3496	SP69D8	Oval	6x9"	8	2⅞"	1.47	1¼	4.02	7.24
16 A 3514	SP69G	Oval	6x9"	10	3⁹⁄₃₂"	3.16	1¾	5.10	9.15

ALL-WEATHER SPEAKERS FIGHT MOISTURE AND DIRT



- Rugged Outdoor Speakers
- Perform Under All Conditions
- Cones Treated for Long Life
- Acoustically Designed Louvers

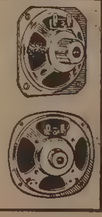
Each speaker is housed in a rugged, 20-gauge steel enclosure that is weatherproof and dustproof. Withstands the destructive effects of humidity, temperature, shock and corrosive climates. Perfect for patios, outdoor theaters, factories etc. Has acoustically designed louvers, and perforated plate backing. Treated speaker cones. Impedance, 8 ohms. Type MS-3BB, 3½" "Mini-Speaker" has 1-oz. magnet; is 4x4x2⅝". 3-watt capacity.

16 A 3414. MS-3BB. 1½ lbs. ...**Each 7.29 Two for 13.12**

Type MMS-8-F. 8" "Music-Mini" has 3.16-oz. magnet; is 9x9x4¼". 70-13,000 Hz response. Capacity. 8 watts.

16 A 3550. MMS-8-F. 5 lbs. ....**Each 14.29 Two for 25.72**

UTAH WEATHERPROOF OUTDOOR SPEAKERS

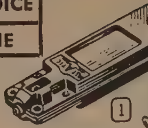


For drive-ins, theatres, golf courses, etc. Specially treated cone, dust cap, ring. 3-4 ohms. *Square; †pincushion. § Watts.

Stock No.	Type SP	Size	§	Mag. Oz.	Lb.	EA.	TWO for
16 A 3460*	35A-WP	3½"	3	.68	½	2.98	5.36
16 A 3464*	4Y-WP	4"	4	.55	½	2.69	4.84
16 A 3465†	5Y-WP	5"	4	.55	½	2.69	4.84
16 A 3469†	8D-WP	8"	8	1.47	1¼	3.98	7.16

ASTATIC
ELECTRO-VOICE
SONOTONE

Exact-Replacement Phono Cartridges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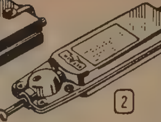
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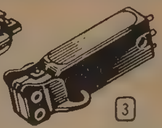
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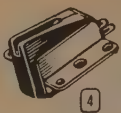
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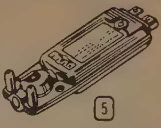
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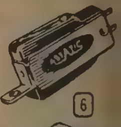

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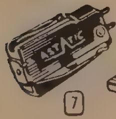

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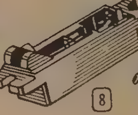
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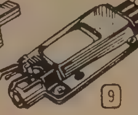
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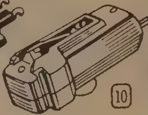
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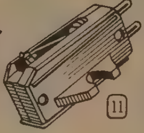
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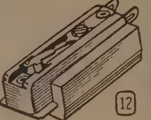
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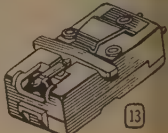
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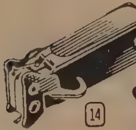
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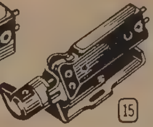
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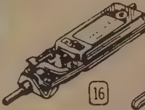
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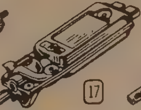
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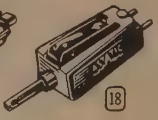

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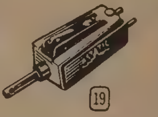

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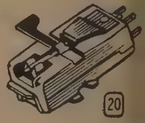
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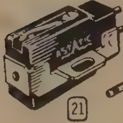

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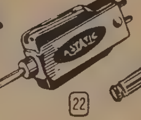

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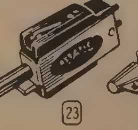

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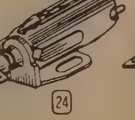
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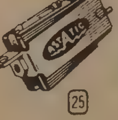

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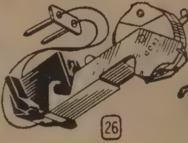
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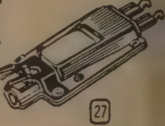
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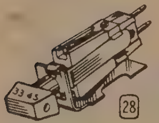

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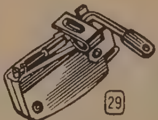
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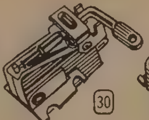
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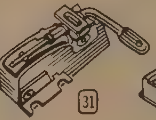
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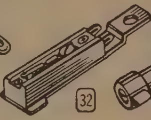
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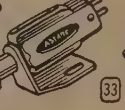

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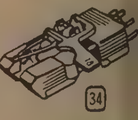
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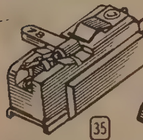
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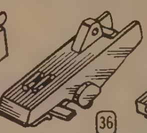
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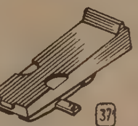
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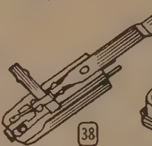
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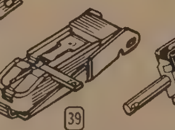
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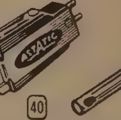

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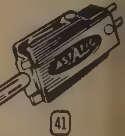

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These stereo and monophonic phonograph cartridges replace the originals used by most manufacturers of phonographs. In "Needle" column of tables below, 1S and 1D indicate .001" synthetic-sapphire or natural-diamond tip for long-playing records; 3S, .003" synthetic-sapphire tip for 78-rpm records; 2S, .002" all-purpose synthetic-sapphire for all mono records; .7S and .7D indicate .0007" synthetic-sapphire or natural-diamond for stereo records. Av. shpg. wt., 3 oz.

SINGLE-NEEDLE MONOPHONIC CARTRIDGES

Stock No.	Mfr's Type	Exact Replacement For	Fig.	Needle(s)	EACH
16 A 1002	Ast. 12	Astatic 12	2	2S	2.67
16 A 1005	Ast. 24	Astatic 24	1	3S	2.97
16 A 1116	Ast. 40-1	Astatic 40-1	3	1S	3.90
16 A 1243	Ast. 40-2	Astatic 40-2	3	2S	3.90
16 A 1238	Ast. 51-1	Astatic 51-1	4	1S	4.44
16 A 1217	Ast. 62-1	RCA 103238, 103238A	9	1S	2.97
16 A 1224	Ast. 66-2	Astatic 66-2	5	2S	2.97
16 A 1216	Ast. 146-7	RCA 123489	13	7S	3.57
16 A 1205	Ast. 310-2	Astatic 310-2	6	2S	2.97
16 A 1118	Ast. 346	RCA 115058	8	7S	4.17
16 A 1244	Ast. 408	RCA 75575	9	1S	2.67
16 A 1206	Ast. 414-1	Astatic 414-1	7	1S	2.67
16 A 1307	Ast. 414-2	Astatic 414-2	7	2S	2.67
16 A 1006	Ast. 416-2	Astatic 416-2	7	2S	3.27
16 A 1210	Ast. 434	GE Show-Tell, Piezo	25	1S	2.67
16 A 1137	Ast. 601	Singer H2200 Portable	32	1S	2.97
16 A 1218	Ast. 609	Magnavox 560313; 3; 5	12	1S	2.97
16 A 1225	Ast. 350	GE Show-Tell, Varco	10	1S	2.67
16 A 1226	E-V 5200	Vaco SN-45	11	2S	2.55

DOUBLE-NEEDLE MONOPHONIC CARTRIDGES

16 A 1219	Ast. 40T	Astatic 40T	14	1S/3S	4.17
16 A 1241	Ast. 40TB	Astatic 40TB	15	1S/3S	5.07
16 A 1211	Ast. 64TS	VM	40	1S/3S	4.17
16 A 1223	Ast. 66TS	Astatic 66TS	16	1S/3S	4.35
16 A 1253	Ast. 66TY	Astatic 66TY	17	1S/3S	3.90
16 A 1013	Ast. 118	Astatic 118-TS	18	1S/3S	3.87
16 A 1014	Ast. 120	Astatic 120	18	1S/3S	3.87
16 A 1015	Ast. 124	Astatic 124TS	19	1S/3S	3.87
16 A 1120	Ast. 146	Ast. 146, BSR X1H(E)	20	1S/3S	3.87
16 A 1245	Ast. 192	Sears 57-8883-S	20	1S/3S	3.87
16 A 1200	Ast. 310T	Astatic 310T	21	1S/3S	3.27
16 A 1016	Ast. 310TS	Astatic 310TS	22	1S/3S	3.27
16 A 1301	Ast. 314TS	Astatic 314TS	23	1S/3S	3.27
16 A 1141	Ast. 410	RCA 77779	27	1S/3S	3.90

DOUBLE-NEEDLE MONOPHONIC CARTRIDGES (Cont'd)

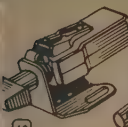
Stock No.	Mfr's Type	Exact Replacement For	Fig.	Needle(s)	EACH
16 A 1152	Ast. 420	BSR TC8H, Ronette TO284	33	1S/3S	3.27
16 A 1153	Ast. 422	BSR TC8M, Ron. DC284	33	1S	3.57
16 A 1032	Ast. 470	Vaco TO-45X	41	1S/3S	3.57
16 A 1220	Ast. 611	Astatic 611 Mastercraft	35	1S/3S	3.57
16 A 1027	E-V 80	Ronette TO-284	28	1S/3S	3.27
16 A 1026	E-V 87	Ronette TO-222	28	1S/3S	3.87
16 A 1139	E-V 88	Ronette DC 500/1	46	1S/3S	3.87
16 A 1019	E-V 119	BSR-TC8M	24	1S/3S	2.88
16 A 1018	E-V 120	BSR-TC8H	24	1S/3S	2.88
16 A 1022 S	E-V 190D	Magnavox	26	1D/3S	12.00
16 A 1221	E-V 5369	BSR X1H	59	1S/3S	2.76
16 A 1227	E-V 5201	Vaco TO-45M, 45X, 55X, 45XM	42	15/3S	3.30
16 A 12[illegible]	E-V 5206	Vaco TO-55, 4, 45M, H45X, TO-H46X	43	15/3S	3.00
16 A 1146	So. 2TA-S	Sonotone 2T-S	30	1S/3S	4.35
16 A 1147	So. 2TA-LB-S	Sonotone 2T-LB-5	29	1S/3S	4.55
16 A 1148	So. 3T-S	Sonotone 3T-S	31	1S/3S	5.72
16 A 1149	So. 3T-SD	Sonotone 3T-SD	31	1D/3S	7.76

DOUBLE-NEEDLE STEREOPHONIC CARTRIDGES

16 A 1355	Ast. 17	Astatic 17	20	.7D/3S	7.05
16 A 1356	Ast. 17D	Astatic 17D	20	.7D/3S	9.45
16 A 1315	Ast. 70TS	Astatic 70TS	47	.7S/3S	4.35
16 A 1314	Ast. 74TS	Astatic 74TS	47	.7S/3S	4.35
16 A 1313	Ast. 76TSB	Ronette 208/A1, 208-2	62	.7S/3S	4.77
16 A 1214	Ast. 80TS	Astatic 80TS	47	.7S/3S	4.50
16 A 1140	Ast. 86TSB	Ronette 105	62	.7S/3S	5.10
16 A 1077	Ast. 133	Motorola 59C61496A01	50	.7S/3S	5.85
16 A 1115	Ast. 133D	Motorola 59C61496A02	50	.7S/3S	8.25
16 A 1123	Ast. 140	G.E. EA1003	20	.7S/3S	4.50
16 A 1124	Ast. 142R	G.E. EA1006, 15358-2	20	.7S/3S	5.55
16 A 1125	Ast. 142RD	G.E. 1009, 15358-1	20	.7D/3S	7.35
16 A 1126	Ast. 142	G.E. RS6518	20	.7S/3S	4.35
16 A 1121	Ast. 153D	Adm. 409C62, -1-2-3-4	50	.7D/3S	7.50
16 A 1159	Ast. 157D	Philco 35-2865-1	50	.7D/3S	9.26
16 A 1162	Ast. 167D	Sears 33-413-0, 414-0	38	.7D/3S	7.50
16 A 1291	Ast. 275D	Sears 33-456-0	66	.7D/3S	8.70
16 A 1157	Ast. 349D	G.E. C-500	36	.7D/3S	10.44
16 A 1158	Ast. 351D	G.E. C-650	37	.7D/3S	10.44
16 A 1161	Ast. 353D	RCA 115276, 115276	39	.7D/3S	8.97
16 A 1215	Ast. 355D	RCA 115302, 115303	39	.7D/3S	9.38

See Page 414 for Replacement Stereo and Monophonic Needles

y Astatic, Electro-Voice, and Sonotone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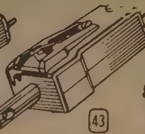
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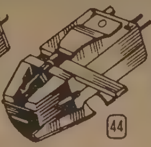
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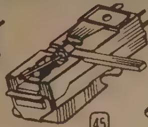
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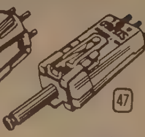
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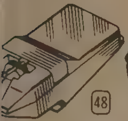
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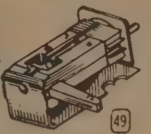
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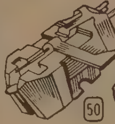
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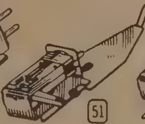
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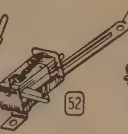
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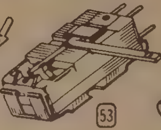
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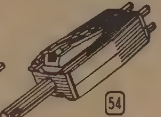
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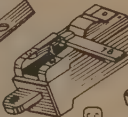
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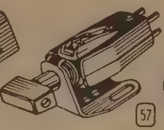
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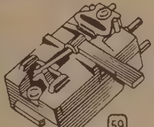
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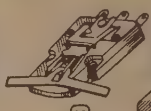
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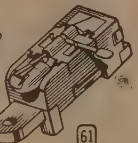
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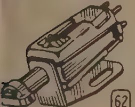
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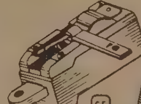
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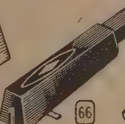
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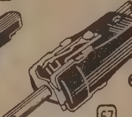
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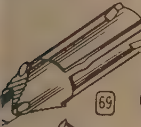
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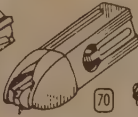
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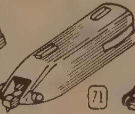
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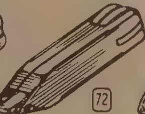
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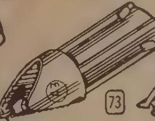
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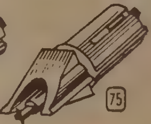
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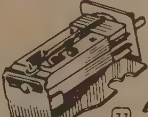
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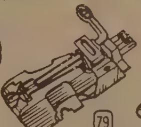
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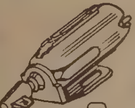
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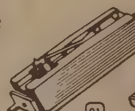
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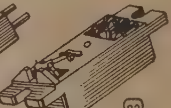

82

OUBLE-NEEDLE STEREOPHONIC CARTRIDGES (Cont'd)

ock No.	Mfr's Type	Exact Replacement For	Fig.	Needle(s)	EACH
A 1133	Ast. 472	Vaco ST-2X, ST-20X	67	.7S/3S	4.50
A 1134	Ast. 474	Vaco ST-4X, ST-40X	67	.7S/3S	4.35
A 1068 S	Ast. 475D	RCA106960A; 110023A	60	.7D/3S	11.40
A 1069	Ast. 475	RCA108213,A; 110023,A	60	.7S/3S	6.00
A 1067	Ast. 477	RCA 106771, A, B	60	.7S/3S	6.00
A 1066 S	Ast. 477D	RCA 106771, A, B	60	.7D/3S	11.40
A 1071 S	Ast. 487D	RCA111348	..	.7D/3S	11.61
A 1246	Ast. 710	Euphonics E-1, U-1	..	.7S/3S	5.97
A 1154	Ast. 718	Euphonics U10	34	.7S/3S	6.57
A 1222	Ast. 718D	Euphonics U11	34	.7D/3S	9.57
A 1170	Ast. T1023	TelefunkenT20/D,T22/D	61	.7S/3S	7.50
A 1229	Ast. 195D	Magnavox 560345-1	55	.7D/3S	7.50
A 1150	E-V 26	E-V 26	49	.7S/3S	6.90
A 1151	E-V 26D	E-V 26D	49	.7D/3S	9.90
A 1163	E-V 95	Ronette 105	62	.7S/3S	5.10
A 1164	E-V 96	Ronette 106	62	.7S/3S	4.77
A 1131	E-V 97	Ronette 105/1 OV-1, T1	46	.7S/3S	4.50
A 1132	E-V 98	Ronette 106-1, P 208-1	46	.7S/3S	4.35
A 1040	E-V 121	BSR TC-8, -S-3, -SH, -SM	80	.7S/3S	4.68
A 1048	E-V 126	Magnavox 560296-2	52	.7S/3S	6.90
A 1047	E-V 126D	Magnavox 560296-1	52	.7D/3S	9.90
A 1046	E-V 127	Magnavox 560281-4	51	.7S/3S	6.90
A 1045	E-V 127D	Magnavox 560281-3	51	.7D/3S	9.90
A 1052	E-V 131	Motorola 59C61640A01 59P60024A24	53	.7S/3S	5.37
A 1053	E-V 131D	Motorola 59C61640A02	53	.7D/3S	7.77
A 1043	E-V 137	Elac KST-102	48	.7S/3S	4.50
A 1395	E-V 141	Telefunken T20/2, T200/2	65	.7S/3S	7.77
A 1397 S	E-V 141D	Telefunken T20/D, T200/D	65	.7D/3S	11.37
A 1398	E-V 143D	Jensen 143 D, SSD5B	45	.7D/3S	7.35
A 1088	E V 148	V-M 29286-C	53	.7S/3S	5.37
A 1089	E-V 148D	V-M 29286-C	53	.7D/3S	7.77
A 1036	E-V 149	Admiral 409C51-1	44	.7S/3S	5.40
A 1037	E-V 149D	Admiral 409C59-3	44	.7D/3S	7.20
A 1072	E V 150	Allied 466, BSRC-1	44	.7S/3S	4.80
A 1051	E-V 150D	Magnavox 860315-1	44	.7D/3S	6.60
A 1144	E V 158	Jensen 158, R2C49B	44	.7S/3S	5.40
A 1050	E-V 158D	Magnavox 560310-1	44	.7D/3S	7.50
A 1202	E-V 271	BSR SX1M	59	.7S/3S	3.60
A 1203	E-V 272	BSRSX1H	59	.7S/3S	3.60
A 1230	E-V5213	Vaco ST-2	54	.7S/3S	3.45
A 1231	E-V5216	Vaco ST-4	54	.7S/3S	3.45
A 1232	E-V141	Telefunken T20/2, T200/2	56	.7S/3S	7.77

DOUBLE-NEEDLE STEREOPHONIC CARTRIDGES (Cont'd)

Stock No.	Mfr's Type	Exact Replacement For	Fig.	Needle(s)	EACH
16 A 1233	E-V 5219	Vaco ST-4X	57	.7S/3S	3.60
16 A 1234	E-V 5026D	Garrard Model 30	58	.7D/3S	6.90
16 A 1165	So. 8TA4-S	Sonotone 8TA4-S	79	.7S/3S	6.47
16 A 1166	So.8TA4-SD	Sonotone 8TA4-SD	79	.7D/3S	8.51
16 A 1167	So. 9TAF-S	Sonotone 9TAF-S	63	.7S/3S	6.54
16 A 1189	So.9TAF-SD	Sonotone 9TAF-SD	63	.7D/3S	8.57
16 A 1191	So. 16TAF-SD	Sonotone16T,19T,916T	64	.7D/3S	6.84
16 A 1292	....	Allied 480, Telrad I-G2S-B	...	.7S/3S	3.46

PLUG-IN MONOPHONIC CARTRIDGES

Stock No.	Mfr's Type	Exact Replacement For	Fig.	Needle(s)	EACH
16 A 1192	Ast. 81T	Astatic 81T	78	1S/3S	2.37
16 A 1193	Ast. 81TX	Astatic 81 TX	78	1D/3S	4.17
16 A 1194	Ast. 81TBX	Astatic 81TBX	68	1D/3S	4.77
16 A 1096	Ast. 89T	Astatic 89T	78	1S/3S	2.97
16 A 1097	Ast. 89TX	Astatic 89TX	78	1D/3S	4.77
16 A 1195	Ast. 89-1	Ast. 89-1, RCA 108555	78	1S	2.55
16 A 1204	Ast. 95	Zenith 142 87	73	1S/3S	2.37
16 A 1207	Ast. 101	Zenith 142-76,-77	73	1S/3S	4.50
16 A 1235	Ast. 83-1	Astatic 83-1, Jensen 42	71	1S	2.80
16 A 1099	E-V 56	EV 56, Mot. 59B634530	69	1S/3S	2.37
16 A 1101	E-V 56D	E-V. 56D, 56DS	69	1D/3S	4.17
16 A 1104	E-V 76	Webcor A1919	70	1S/3S	2.37
16 A 1105	E-V 76D	Webcor A1920	70	1D/3S	4.17

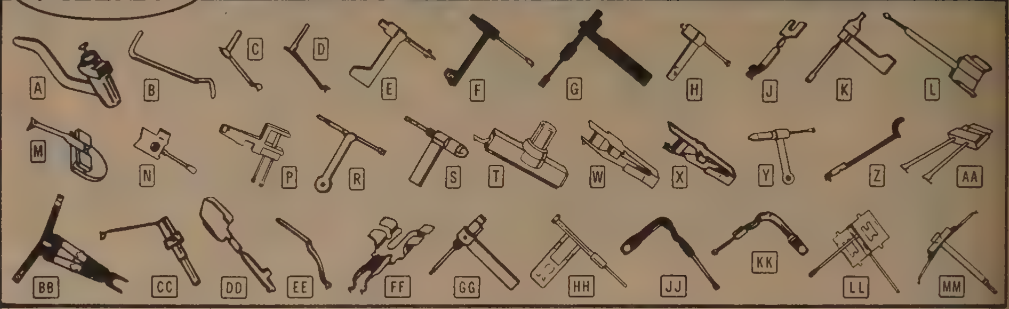
PLUG-IN STEREOPHONIC CARTRIDGES

Stock No.	Mfr's Type	Exact Replacement For	Fig.	Needle(s)	EACH
16 A 1259	Ast. 13TX	Astatic 13TX	72	.7D/3S	5.37
16 A 1258	Ast. 13TBX	Astatic 13TBX	68	.7D/3S	5.97
16 A 1257	Ast. 13T	Astatic 13T	72	.7S/3S	3.57
16 A 1256	Ast. 13TB	Astatic 13TB	68	.7S/3S	4.17
16 A 1459	E-V 66D	E-V 66D, 66DS	73	.7D/3S	5.97
16 A 1462	E-V 106	E-V 106	74	.7S/3S	4.17
16 A 1463	E-V 106D	E-V 106, 106DS	74	.7D/3S	5.97
16 A 1466	E V 108	E-V 108	75	.7S/3S	4.17
16 A 1467	E V 108D	E-V 108D, 108DS	75	.7D/3S	5.97
16 A 1197	So. 10T2-S	Sonotone N10T2-S	76	.7S/3S	5.14
16 A 1198	So. 10T2-SD	Sonotone N10T2-SD	76	.7D/3S	7.17

SINGLE-NEEDLE STEREOPHONIC CARTRIDGES

Stock No.	Mfr's Type	Exact Replacement For	Fig.	Needle(s)	EACH
16 A 1403	E-V 21	E-V 21	77	.7S	6.30
16 A 1413	E-V 21D	E-V 21D	77	.7S	9.00
16 A 1209	E-V 5178	E-V 191	81	.7S	3.30
16 A 1236	E-V 264	RCA 115059	82	.7S	4.89
16 A 1247	Ast. 348	RCA 11059	..	.7S	4.77

ALLIED DIAMOND PHONOGRAPH NEEDLES



1^{88}

- Top-quality needles
- By famous manufacturers
- Precision-crafted
- Minimum record wear

Protect your records with a top-quality diamond replacement needle. Precision-crafted from whole diamonds by a famous manufacturer to Allied's exacting specifications. In table, Type No. suffixes: XD, single diamond stereo tip; XSD, synthetic sapphire (for 78 rpm) and stereo diamond tips; LPD, long-play diamond, monophonic; SD, synthetic sapphire (for 78 rpm) and diamond, both monophonic; D, diamond, monophonic. Shpg. wt., 2 oz.

FOR ASTATIC CARTRIDGES

Stock No.	Type	Fig.	For Cartridge No.	EACH
16 A 1644	A-685D	A	57-T Series	1.88
16 A 1658	A-74LPD	B	51, 53, 59, 402	1.88
16 A 1645	A-75LPD	C	ACD Series; 40, 41	1.88
16 A 1657	A-67LPD	D	64, 66, 68, 94, 405, 406	1.88
16 A 1282	A-94XSD	E	133, 137, 233, 237, 459, 483, 485, 497	1.88
16 A 1171	A-98XSD	E	153, 157, 461, 481	1.88
16 A 1172	A-100XSD	E	140, 142, 146	1.88
16 A 1275	A-102XSD	E	138D	1.88
16 A 1276	A-104XSD	E	148D	1.88
16 A 1742	A-90XSD	F	17; 17D	1.88
16 A 1501	A-94XSD	H	133; 133D	1.88
16 A 1277	A-106XSD	H	181D	1.88
16 A 1669	CRA-55XD	J	70 Series; 80 Series	1.88
16 A 1281	CRA-55SD	J	118, 120, 124, 310, 312, 414, 416, 420, 422, 424, 426	1.88

FOR BSR CARTRIDGES

16 A 1278	B1XSD	H	C-1	1.88
16 A 1669	CRA-55XD	J	TC-8S, H Series	1.88

FOR ELECTRO-VOICE CARTRIDGES

16 A 1667	E-98XD	L	21, 26	1.88
16 A 1510	E-10XSD	L	117, 131, 148	1.88
16 A 1514	E-15XSD	L	132; 132D	1.88
16 A 1518	E-16XSD	L	149; 149D	1.88
16 A 1279	E-19XSD	L	169D; 186D	1.88
16 A 1284	E-21XSD	H	198, 199; 282	1.88
16 A 1500	E29X50	G	5026D	1.88

FOR EUPHONIC CARTRIDGES

16 A 1614	J-47XD	M	E Series	1.88
16 A 1752	J-57XD	N	U-1 Series; U-2 Series	1.88
16 A 1039	EU-3XSD	P	U-12, U-13 (R)	1.88
16 A 1173	EU-2XSD	P	U-10, U-11, R	1.88

FOR G.E. CARTRIDGES

16 A 1642	G-19XD	T	VR-227	1.88
16 A 1643	G-20XD	T	VR-225	1.88
16 A 1523	G-1D	W	RPX Series	1.88
16 A 1054	G-1XD	W	RPX Series (for playing stereo records on mono equip).	1.88
16 A 1060	G-4XD	X	4G Series VRII (for playing stereo records on mono equip).	1.88
16 A 1601	G-4D	X	4G Series; VR II	1.88
16 A 1502	G-21XSD	Y	C-100, C-200, C-400, RS3824, ER97X, 250	1.88
16 A 1503	G-10LPD	R	Early RPX Series	1.88
16 A 1504	G-23XD	S	VR 1000-7	1.69
16 A 1283	2739DS	Y	C-100A, C-200, C-400	1.88
16 A 1286	G-24XSD	H	C-50, C-500, C-600, C-650	1.88

FOR RCA CARTRIDGES

16 A 1622	M-77XSD	AA	106770A, 106771A	1.88
16 A 1653	M-74LPD	CC	75475, 77779, 75575	1.88
16 A 1753	M-80XSD	BB	110020, 110021	1.88
16 A 1505	M-82XD	Z	RPM-203 (115059)	1.88
16 A 1287	M-84XSD	H	115276;115303; 115303	1.88

FOR RONETTE CARTRIDGES

16 A 1649	CRA-55LPD	J	All Ronette Monophonic; Astatic; BSR	1.88
16 A 1288	CRA-57LPD	DD	Mono PC-422, SCW-395, DC-500 Series	1.88
16 A 1665	CRA-57XD	DD	P-105, 106; BF-40, Ronette Stereo; Admiral Ensign	1.88
16 A 1437	CRA-572D	DD	SCW-395-2	1.88

FOR SHURE CARTRIDGES

Stock No.	Type	Fig.	For Cartridge No.	EACH
16 A 1650	JPS-30LPD	EE	P-30, 72, 76, 77, 79; PC Series	1.88
16 A 1436	JPS-35SD	FF	P-7, 8, 9; W9; WC10	1.88
16 A 1651	JPS-36SD	FF	PC-2, 3, 4, 5; P-7, 8, 9; Wt-9, 10	1.88

FOR SONOTONE CARTRIDGES

16 A 1506	S-86X5D	GG	21T, 22T, 23T, 24T, 35T, 43T	1.88
16 A 1746	S-80XSD	HH	18T Series	1.88
16 A 1747	S-82XSD	HH	9T; 916T; 16T; Adm. Ensign	1.88
16 A 1620	S-71XSD	JJ	8T; A Series	1.88
16 A 1289	S-72XSD	JJ	8TA Series	1.88
16 A 1655	S-61SD	KK	3T Series	1.88
16 A 1656	S-66SD	KK	2T, 5T, and 7T Series	1.88
16 A 1078	S-66XSD	KK	2T, 5T, 7T Stereo Series	1.88
16 A 1111	S-61XSD	KK	3T Series (for playing stereo records on mono equip).	1.88
16 A 1290	S-68SD	KK	2T Series	1.88

FOR TELEFUNKEN CARTRIDGES

16 A 1750	TE-19XSD	LL	T-20; T-20DS	1.88

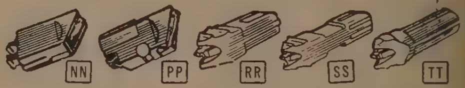
FOR VACO CARTRIDGES

16 A 1669	CRA-55XD	J	ST-20; ST-40; ST-200	1.88
16 A 1508	VA304SD	K	CN62; CN68; CN75	1.88

FOR ZENITH CARTRIDGES

16 A 1174	Z1XSD	MM	142-126, 7, 8; 142-136, 7 142-140, 41	1.88

NEEDLE-CARTRIDGE COMBINATIONS



ZENITH "COBRA ARM" PLUG-IN NEEDLE-CARTRIDGES

Stock No.	Type No.	Zen. Type	Fig.	Stylus	EACH
16 A 1631	S-15780	Z-62	NN	Syn. Sapphire	1.88
16 A 1635	142-76, 142-77	Z-59	PP	Syn. Sapphire	4.29
16 A 1697	142-76, 142-77	Z-59SD	PP	Diamond	8.95

DIAMOND PLUG-IN NEEDLE-CARTRIDGES

Stock No.	Type No.	Fig.	For Cartridge	EACH
16 A 1606	A-41SD	SS	Astatic 81TX	4.49
16 A 1610	A-43SD	SS	Astatic 89TX	4.49
16 A 1689	A-44XSD	SS	Astatic 13TX Stereo	4.95
16 A 1625	E-36SD	TT	E.V. 56DS	4.49
16 A 1627	E-37SD	RR	E.V. 76DS	4.49
16 A 1690	E-46XSD	TT	E.V. 66DS Stereo	4.95

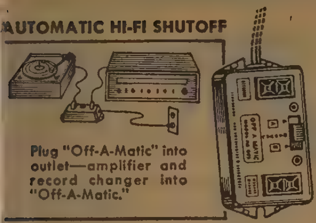
SYNTHETIC-SAPPHIRE PLUG-IN NEEDLE-CARTRIDGES

Stock No.	Type No.	Fig.	For Cartridge	EACH
16 A 1623	A-41	SS	Astatic 81T	1.88
16 A 1609	A-43	SS	Astatic 89T	1.88
16 A 1615	A-44X	SS	Astatic 13T Stereo	3.49
16 A 1624	E-36	TT	E.V. 56	1.88

See pages 412 and 413 for replacement cartridges

Selected Hi-Fi and Phono Accessories

AUTOMATIC HI-FI SHUTOFF



Plug "Off-A-Matic" into outlet—amplifier and record changer into "Off-A-Matic."

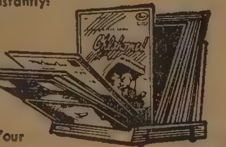
4^{95}

- Shuts Off After Last Record
- Manual or Automatic Operation
- For Most Record Changers

Compact "Off-A-Matic" unit shuts off en-ire hi-fi system automatically at end of last ecord. Simply plug "Off-A-Matic" into vall outlet and amplifier (or receiver) and ecord changer into "Off-A-Matic." Works vith all record changers having automatic hut-off. Switch permits manual operation f the automatic-shutoff feature is not de-ired. Steel case, 2⅛x4¾x1⅞". 6' AC cord. Shpg. wt., 2 lbs.
4 A 9234........................4.95

RECORD-MATIC RECORD RACK

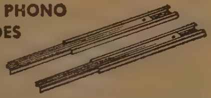
Find the Record Album You Want Instantly!



Adds Life to Your Valuable Records

Are you tired of hunting for the record album you want? Record-Matic record rack does the browsing for you—it starts and stops with the touch of a finger, runs fast or slow for your convenience. Each album is exposed to view and is easy to find—takes all the work out of album storage. You stop operation manually for instant record selection. Protects your valuable record collection and record jackets, too. It's automatic, yet has no springs, magnets or motor. 12½x12½x12½". 4 lbs.
6 A 2019 X......................7.95

"EASY-PULL" PHONO DRAWER SLIDES



Low as **1^{98}**

Heavy steel ball-bearing slides for custom-mounting record changer in high-fidelity cabinet. Accommodates any record changer base. Offers quiet, effortless rolling action. 15" long, 11-inch travel. Shpg. wt., 3 lbs.
16 A 2046............................1.98

16 A 2047. 13-inches Long. 9-inch travel. Shpg. wt., 3 lbs......................1.98

16 A 2044. Heavy-Duty 18-inch Full Extension Slides. Have extra-long 18-inch travel. Shpg. wt., 4 lbs............................3.50

RECORD CARE BOOKLETS

Professional methods for record care and use

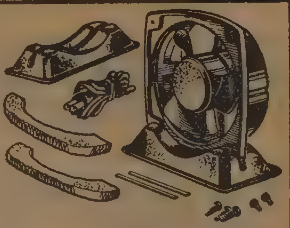
PROFESSIONAL METHODS FOR RECORD CARE AND USE. Booklet by Cecil E. Watts, authority on record care, supplies combined experience of professionals on methods for cleaning records, proper care of stylus, etc.
23 A 7417. Wt., 1½ oz.....50¢

HOW TO CLEAN MAINTAIN AND PROTECT RECORDS

HOW TO CLEAN, MAINTAIN AND PROTECT RECORDS. Cecil E. Watts. Explains dust static, theory of static behavior, how to handle, rejuvenate records.
23 A 7422. Wt., 1½ oz....25¢

DELWYN "WHISPER FAN" by ROTRON PROTECTS EQUIPMENT FROM HEAT

Prevent operating failure in expensive high-fidelity components, television sets, tape recorders and other electronic equipment. Extremely quiet Whisper Fan delivers 60 cfm of cooling air with no audible noise level. Protects your equipment against deterioration by heat—makes it last longer and perform better. Its compact design allows installation almost anywhere. Only 4 11/16" square by 1½" deep. Can be mounted in round or square opening. Airflow is reversible. Consumes only 7 watts of power. With cord, plug. For 110-120 V, 60 Hz AC.
16 A 2031. Shpg. wt., 1½ lbs..........15.95

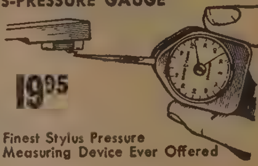


15^{95}

- Super Quiet Whisper Fan
- Delivers 60 cfm of Air

SHERR-TUMICO PRECISION STYLUS-PRESSURE GAUGE

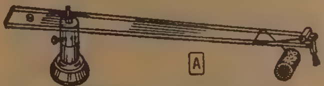
Precision dynamometer gauge measures stylus pressure of pickup arm. Assures maximum protection of phono cartridge and records. Easy-to-read meter calibrated in 0-6 grams. 1¾" actuating arm has 15° movement either up or down. Two needles operate simultaneously. When pressure is released one needle returns to zero, other remains at max. reading. After reading, manual reset knob returns needle to zero. 13/16x1 11/16x3⅞" including arm.
16 A 2040. Shpg. wt., 12 oz.................19.95

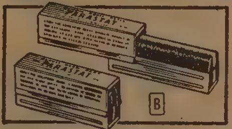


19^{95}

Finest Stylus Pressure Measuring Device Ever Offered

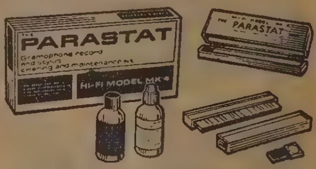
RECORD CLEANING EQUIPMENT AND CUING DEVICE





[A] AUTOMATIC "DUST BUG." For manual turntables. Keeps records free from dust. Plastic arm with nylon brush, dust-collector pad mounts on end of pickup arm. With pad, cleaning fluid (extra fluid below).
16 A 2022. Shpg. wt., 8 oz...............6.50
16 A 2018. ANTISTATIC FLUID. 2 oz.....2.00

[B] MANUAL PARASTAT. Removes dust, grit and residue deep inside record grooves. Elliptical nylon bristles encased in wood.
16 A 2021. Shpg. wt., 8 oz.............15.00



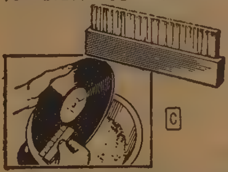
PARASTAT
Gramophone record and stylus cleaning and maintenance kit
HI-FI MODEL MK4
PARASTAT

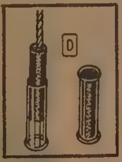
HI-FI PARASTAT KIT

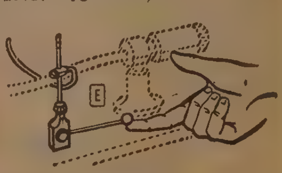
15^{00}

- Cleans Records Thoroughly
- Relaxes Any Static Charge

Meets stringent demands imposed by low-pressure elliptical styli. For new records only or those in new condition. Cleans completely sharp corners and minute high-frequency configurations in record grooves. Establishes correct degree of humidity at working surface of record to relax static charge. Includes case with humidifier, antistatic fluid and dispenser, distilled water and dispenser, stylus cleaner.
16 A 2015. Shpg. wt., 8 oz...........15.00







[C] RECORD WASH BRUSH. Restores brilliant "highs," rejuvenates old records, removes background noise by deep cleaning. Each bristle micro-ground to elliptical shape. With instructions.
16 A 2020. Shpg. wt., 2 oz...........3.50

[D] "PARASTATIC PREENER" DUST REMOVER. Get your records really clean. Rub wetted center wick of brush over rotating record. Chemical process cleans them like new. Safe to use, leaves no damaging film. Extends record life. Size, 5½x6¼".
16 A 2261. Shpg. wt., 6 oz..............4.00

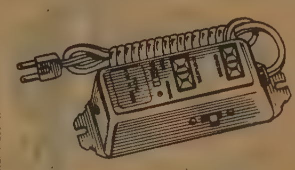
[E] ORTOFON "HI-JACK" CUING DEVICE. Precision instrument specially designed for manual turntables. Permits you to raise and lower turntable pickup arm without touching it. "Floats" the arm to the record at precisely the right spot.

Accurate safety device prevents damaging needles or scratching records through human mishap. It's a "must" for those who want maximum protection for high-quality diamond needles and valuable, irreplaceable records. Installs in seconds.
16 A 2246. Shpg. wt., 12 oz.........10.00

ACOUSTIC INSULATION FOR SPEAKER ENCLOSURES

Prevents reverberation and distortion caused by standing waves created inside speaker enclosure. Improves performance of virtually any enclosure. Numerous other uses—insulating automobile from engine and road noises, etc. Cuts into any shape, presses into place with glue. Fireproof. ½x12x72".
16 A 2262 X. Foam Rubber. Shpg. wt., 1½ lbs.............................1.98
16 A 2042 X. Fiberglas. Shpg. wt., 1½ lbs.................................1.32

ROBINS Record and Phono Care Accessories

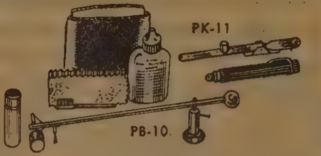


PS-3 AUTOMATIC SHUTOFF FOR STEREO HI-FI SYSTEMS

6.99
- Turns Off Hi-Fi System
- May Be Operated Manually
- All Solid-State Circuit

Safeguard your stereo hi-fi system with this automatic shutoff. Turns your hi-fi system off automatically. Not a luxury item, but a practical safety device that will insure against costly accidents due to forgetfulness. Prevents "burning up" of equipment by shutting off complete system after last record is played. Solid-state design assures complete reliability.

Handy switch on side of unit allows you to change to manual shutoff operation. Has two separate outlets for amplifier and phono. Suitable for all models of domestic and foreign equipment. Rated at 3 amps, 350 watts. Attractive, durable metal housing protects unit for years of dependable service. Size, 6½x2¼x1¾". With 6-ft. AC line cord that plugs into 110-120 volts, 60 Hz AC.
16 A 2224. Shpg. wt., 2 lbs.....6.99

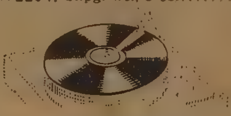


PK-11 RECORD CARE KIT

Contains professional record sweep, anti-static cleaner and lubricant. Cleans records automatically as they play. Mounts to phono by suction cup. Stylus microscope, pressure gauge, record cleaning kit.
16 A 2203. Shpg. wt., 1¼ lbs.........7.15

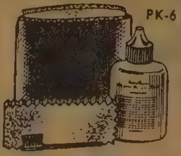
PB-10 RECORD SWEEP

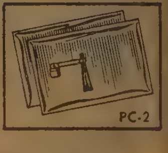
Sweeps dust and other particles from sound grooves. With anti-static cleaner, lubricants. Improves sound fidelity.
16 A 2204. Shpg. wt., 3 oz..........2.98



PC-6 END RECORD

Protects records from dust and dirt, lets you know when last record has been played. Features pre-recorded sign-off on one side—tells you when last record is played; turns changer mechanism off automatically. Can be used without sign-off on reverse side. Covers records when they are stacked on changer. Automatically drops after last record has been played.
16 A 2206. Shpg. wt., 9 oz..........1.98



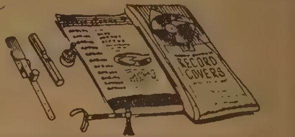


PK-6 "ROB-O-STAT" KIT

Super-soft foam applicator mitt; 1½-oz. anti-static cleaner and lubricant, poly-foam pad. With stylus brush.
16 A 2210. Shpg. wt., 8 oz..........1.49

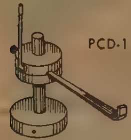
PC-2 CLEANING CLOTHS, BRUSH

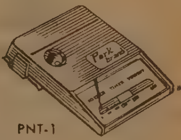
Anti-static treated cloths. Brush clips to tone arm to remove dust from records while they play. Shpg. wt., 4 oz.
16 A 2213..........................79¢



PK-3A RECORD CARE KIT

Deluxe record care kit helps you get top fidelity from your records, and increases record life. Contains: PSG-3 stylus pressure gauge; adjustable stylus brush; record brush to clip on tone arm; turntable level; anti-static record cleaning cloth; 18 protective round-bottom record covers. Pressure gauge and balance weight track low as ½ gram for improved sound, long life.
16 A 2205. Shpg. wt., 1 lb............4.49



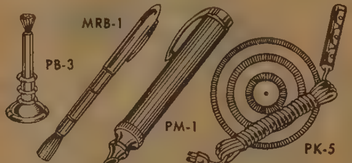


PCD-1 RECORD CUING CONTROL

For manual turntables. Raise, lower arm without touching it. Floats to desired track with scratchless pin-point accuracy.
16 A 2284. Shpg. wt., 12 oz..........6.98

PNT-1 PHONO STYLUS TIMER

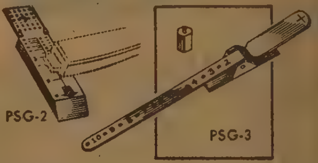
Gauge calibrated to 400 hours indicates stylus wear to prevent needless record damage. Sapphire stylus should be replaced after 250 hours use. Diamond stylus, after 400 hours use. Timer also indicates time for cleaning and general maintenance of equipment and records. Self-stick base for mounting to phono deck. Imported.
16 A 2287. Shpg. wt., 6 oz..........4.98



PB-3 ADJUSTABLE STYLUS BRUSH. For use with all phonos. Spring secured, adjusts from ¾" to 2¼" height. Removes dust from stylus during cycling. Self-stick base.
16 A 2002. Shpg. wt., 3 oz..........85¢

MRB-1 ALL-PURPOSE BRUSH. Removes dust and dirt from equipment, stylus and records. Telescoping soft camel's hair brush in gold finish case. Pocket clip.
16 A 2222. Shpg. wt., 3 oz..........99¢

PM-1 STYLUS MICROSCOPE. Pocket size, precision lenses. Knurled focusing adj., slot for needle inspection. 3¼x½" dia.
16 A 2286. Shpg. wt., 4 oz..........1.89

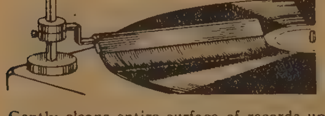


PK-5 STROBE AND LIGHT KIT. Checks phono for speed accuracy at 33⅓, 45 and 78 rpm. Includes neon lamp and strobe disc. Instructions. For 110 V, 60 Hz AC.
16 A 2014. Shpg. wt., 6 oz..........1.59

PSG-2 STYLUS PRESSURE GAUGE. Calibrated balanced gauge measures stylus pressure from ½ gram. Assures proper tracking; prevents stylus and record wear.
16 A 2258. Shpg. wt., 4 oz..........89¢

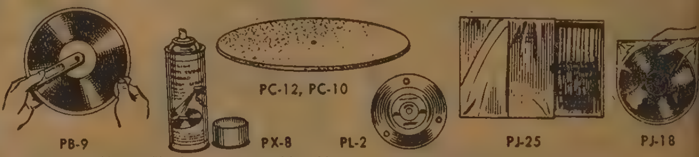
PSG-3 STYLUS PRESSURE GAUGE. Calibrated and balanced. Measures pressure to ½ gram. Includes counterweight.
16 A 2223. Shpg. wt., 3 oz..........99¢

PB-88 "CLEAN-SWEEP" CAMEL'S HAIR BRUSH



Gently cleans entire surface of records up to 12" with each revolution. Connects easily, mounts to phono with adhesive base pad, needs no screws that will harm phono base. For manual record changers only.
16 A 2285. Shpg. wt., 3 oz..........4.29

PRA-50 RECORD SPIDERS. (Not illustrated). Fifty high-impact plastic, reusable 45 rpm record adapters. Easily inserted in 45-rpm records to permit playing on conventional spindle.
16 A 2289. Shpg. wt., 6 oz..........79¢



PB-9 DISK-WHISK RECORD CLEANER. Cleans, lubricates both sides of record in one operation. For 45 rpm and LP records. Anti-static silicone coating. With handling disc.
16 A 2207. Shpg. wt., 5 oz..........1.19

PX-8 ANTI-STATIC RECORD CLEAN SPRAY. Silicone lubricant and cleaner prevents dust accumulation. Silicone coating.
16 A 2208. Shpg. wt., 11 oz..........1.19

PC-12 FOAM PHONO CUSHION. Cushions record drop and reduces slippage. Includes strobe disk. 11¾" diameter.
16 A 2220. Shpg. wt., 3 oz..........75¢
16 A 2221. PC-10. Above, 9¾" dia. ....69¢

PL-2 ROUND TURNTABLE LEVEL. For accurate leveling of phono turntables. Self-stick. Mounts to phono deck.
16 A 2255. Shpg. wt., 3 oz..........1.59

PJ-25 ALBUM COVERS. 12 heavyweight plastic window-clear 12" album covers. Special thumb notch permits easy insertion and removal of records. Shpg. wt., 6 oz.
16 A 2225..........Pkg. of 12 for 99¢

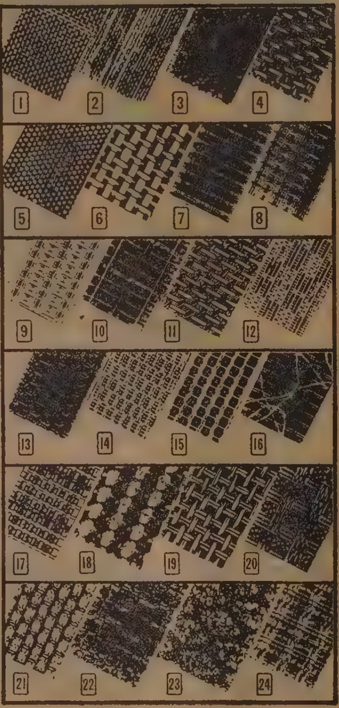
PJ-18 RECORD COVERS. Round bottom, polyethylene plastic protective covers for up to 12" records. Prevents scratching, seals out dust and moisture. Shpg. wt., 6 oz.
16 A 2226..........Pkg. of 18 for 75¢

Hi-Fi Grille Cloth, Switches, Controls, Cables

POPULAR ACOUSTONE SPEAKER GRILLE CLOTH

- Laboratory tested and approved
- Patterns to match any decor
- Special open-weave design
- Will not sag, shrink or fade
- Keeps dust out of speakers
- Patterns are color-fast

ide selection of beautifully woven speaker grille cloth designed to keep dust and her foreign matter out of speakers and allow acoustically transparent passage of sound aves. Laboratory tested and approved. Won't sag, shrink or fade. Highly attractive, lor fast patterns. You'll find a decorative pattern to match virtually any decor. Made extremely durable material with a special open-weave design that allows completely restricted passage of all audio frequencies. Special construction and weaving techques prevent sagging and shrinking. Available in pieces, 36x36", or in lengths over 36". ecify choice when ordering. Shpg. wt. per yard, 15 oz.

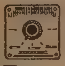


BUDGET-PRICED

Description	Pattern No.	Fig.	Stock No. In Lengths Over 1 Yd.	Stock No. 36x36"	PER YARD
old and Beige Random Metal	A-27	1	16 A 2113 X	16 A 2114 X	2.69
atural Irish Effect	A-Pls. Lin	2	16 A 2117 X	16 A 2118 X	2.69
rown with Beige Nubs	A-Drk. Lin	3	16 A 2119 X	16 A 2120 X	2.69
alnut Cane w/Bronze Threads	A-2412	4	16 A 2236 X	16 A 2237 X	2.69
at. Color Straw Imported Look	A-Pand.	5	16 A 2121 X	16 A 2122 X	2.69
lver Random Metal	A80	6	16 A 2124 X	16 A 2134 X	2.69
MODERATELY PRICED					
ahogany with Ivory Threads	B-211	7	16 A 2103 X	16 A 2104 X	3.49
alnut with Bronze Threads	B-811	8	16 A 2115 X	16 A 2116 X	3.49
lend White/Black Honeycomb Weave	B-625	9	16 A 2125 X	16 A 2126 X	3.49
ght Walnut with Gold Metal Box	B-711	10	16 A 2325 X	16 A 2326 X	3.49
at. & Walnut Cane w/Gold Metal	B2422	11	16 A 2313 X	16 A 2314 X	3.49
eige and Walnut with Gold Metal	B3705A	12	16 A 2238 X	16 A 2239 X	3.49
olid Black Ribbon Honeycomb	B4542	13	16 A 2240 X	16 A 2241 X	3.49
ght Gray w/Random Silver Metal	B5081	14	16 A 2127 X	16 A 2128 X	3.49
DELUXE DECORATOR STYLES					
hite w/Random Gold Thread	C6423	15	16 A 2321 X	16 A 2322 X	4.29
lack with Gold Cobweb	C-453	16	16 A 2148 X	16 A 2149 X	4.29
eige, White & Tan w/Gold Metal	C7104	17	16 A 2154 X	16 A 2155 X	4.29
lack w/Raised Walnut Cane	C2600	18	16 A 2136 X	16 A 2137 X	4.29
lended Walnut Cane	CWal.	19	16 A 2138 X	16 A 2139 X	4.29
alnut Interwoven Wood Effect	DWW-1	20	16 A 2244 X	16 A 2245 X	4.29
an-Beige Interwoven w/Gold Metal	D2425	21	16 A 2129 X	16 A 2130 X	4.29
rown and Olive Interwoven Grille	D2621	22	16 A 2140 X	16 A 2141 X	4.29
rown w/Raised Walnut Fleur Dirlis	D3012	23	16 A 2142 X	16 A 2143 X	4.29
icker Walnut/Rust on Black Base	D6000	24	16 A 2133 X	16 A 2135 X	4.29

SELECTED AUDIO SWITCHES AND CONTROLS

Stock No.	Fig.	Mtg.	Description	EACH
16 A 2158	25	W	Mono 8-Ω L-pad spkr. control*	3.27
16 A 2160	25	W	Stereo 8-Ω L-pad spkr. control*	5.61
16 A 2161	25	W	Stereo 16-Ω L-pad spkr. control*	5.61
16 A 2169	25	W	Stereo 3-speaker selector switch*	3.27
16 A 2170	26	SM	Mono 3-speaker selector switch*	3.63
16 A 2186	26	SM	Stereo 2-speaker selector switch*	4.17
16 A 2194	27	SM	1 of 3 stereo sources to 1 input†	4.17
16 A 2197	28	PM	Stereo selects any of 6 spkr. sets	2.64
16 A 2202	29	PM	Distributes volume between two speakers	1.15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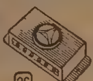
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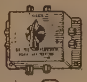
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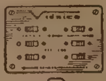
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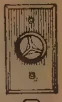

29

Famous name audio switches and controls. Quality-built to exacting standards for consistently fine performance and long life. All have solder terminals except *screw terminals. †Phono jacks. In mtg. column of table left. W indicates wall plate mounting; SM surface mounting; PM panel mounting. Fig. 25 is rated 10 watts; Fig. 29, 5 watts. Av. shpg. wt., 10 oz.

ALLIED MOLDED HIGH-FIDELITY AUDIO CABLES

TWO-CONDUCTOR STRAIGHT PHONE PLUG TO VARIOUS CONNECTORS

Stock No.	Mfr's Type	Conn't's Fig.	Conn't's Fig.	L.	EA.
16 A 2059	4C-3076	B	A	6'	1.19
16 A 2063	4C-3064	B	A	10'	1.59
16 A 2060	4C-3075	B	B	6'	1.69
16 A 2061	4C-3074	B	B	10'	1.99
16 A 2050	4C-3062	B	F	6'	1.69
16 A 2072	4C-3061	B	F	10'	1.99
16 A 2055	4C-3063	B	G	6'	.99
16 A 2051	4C-3060	B	H	6'	1.19

STRAIGHT TINI-PLUG TO VARIOUS CONNECTORS

16 A 2065	4C-3066	D	A	6'	1.44
16 A 2053	4C-3058	D	B	6'	1.59
16 A 2054	4C-3057	D	G	6'	1.19

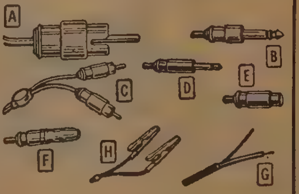
STRAIGHT PHONO PLUG TO VARIOUS CONNECTORS

Stock No.	Mfr's Type	Conn't's Fig.	Conn't's Fig.	L.	EA.
16 A 2058	4C-3056	A	A	18"	.59
16 A 2057	4C-3054	A	A	36"	.69
16 A 2056	4C-3055	A	A	6'	.89
16 A 2062	4C-3073	A	A	10'	1.19
16 A 2070	4C-3071	A	E	36"	.89
16 A 2068	4C-3069	A	E	6'	.99
16 A 2064	4C-3065	A	E	10'	1.19
16 A 2067	4C-3068	A	G	36"	.59
16 A 2086	4C-3067	A	G	6'	.69
16 A 2052	4C-3059	A	H	6'	.99

SPECIAL STEREO CABLES

Two shielded cables inside a common jacket. Phono plugs color coded. 5 oz.

16 A 2069	4C-3070	C	C	36"	1.79
16 A 2071	4C-3072	C	C	6'	1.99

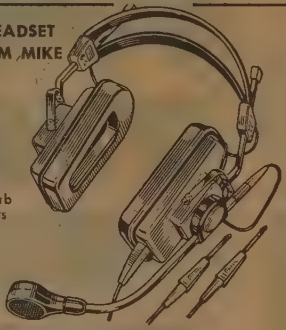


Quality molded hi-fi cable assemblies. Built-in cable clamps eliminate strain on cable. Functionally designed handles provide easy grip. Cables are chrome-grey with matching plastic handles. A—phono plug; B—phone plug; C—phono plugs; D—tini-plug; E—phono jack; F—phone jack; G—stripped and tinned; H—alligator clips. Av. wt., 5 oz.

Language Lab and General-Purpose Headsets

TELEX HEADSETS FOR EVERY APPLICATION

DELUXE HEADSET WITH BOOM MIKE



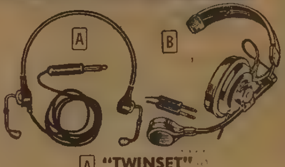
Mike rotates 360°, is detachable

Meets all language lab requirements

2400-42. Dual headset with field-detachable 360° rotating mike. Response: dynamic headset, 20-20,000 Hz; dynamic noise-canceling mike, 100-8000 Hz. Impedance: headset, 600 ohms; mike, 300 ohms. Soft, removable earcushions form snug acoustic seal. 5′ cord, straight ¼″ molded plugs.
17 A 6287. Shpg. wt., 1 lb................33.95

17 A 6288. Model 2400-19. Same as above, but right-angle plugs. Shpg. wt., 1 lb..........33.95

17 A 6289. Model ACV-4 Extra Foam Earcushions. Brown, washable. Shpg. wt., 2 oz......Pair 1.50



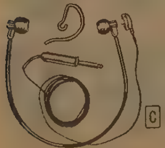
A "TWINSET"

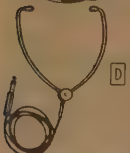
HTW-2. Lightweight and comfortable headphones for pilots, Hams, etc. Sound is fed direct to ears thru adjustable arms. Background sounds remain intelligible. Magnetic elements rest at temples. 500 ohms. Weighs 1.6 oz. 5′ cord, ¼″ phone plug.
17 A 6262. Wt., 10 oz......14.50

B SINGLE PHONE, MIKE

MRB-75 "Magna-Twin Mark III. Versatile headphone/mike for professional use. Magnetic headset element has response of 50-10,000 Hz; carbon boom mike, 50-6000 Hz. Imp.: headset, 500-600 ohms; mike, 20 ohms. Mike boom cannot accidentally rotate mike out of position. 5′ cord, ¼″ phone plugs. Gray.
17 A 6390. Wt., 1 lb......24.95

LIGHTWEIGHT SECRETARIAL HEADSETS



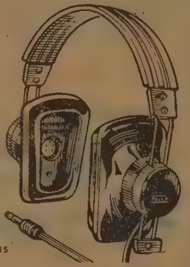


C **"Tele-Fi" Headset.** Under-the-chin headset delays sound to one ear for better clarity. Frequency response, 60-6000 Hz. Earloop is provided for one-ear listening. Choice of 15 ohm or 2000 ohm impedance. Supplied with 5′ cord, ¼″ phone plug.
17 A 6149. Model HFR-91. 15 ohms. Shpg. wt., 1 lb..........5.95
17 A 6154. Model HFY-91. 2000 ohms. Shpg. wt., 1 lb........5.95
17 A 6216. Replacement Cord. Shpg. wt., 3 oz..............2.25

D **HMY-2 Secretary's Monoset.** Weighs only 1.2 oz. Worn under chin for convenience; keeps headset cord from getting in the way, won't mess hairdos. Ideal for use in transcribing from office dictation equipment. Has magnetic element, metal housing, removable earplugs. Frequency response: 50-5000 Hz. Impedance: 2000 ohms. Maximum input, 25 mW. With 5′ cord, standard ¼″ phone plug. Replacement cord is same as for "Tele-Fi" above.
17 A 6184. Shpg. wt., 8 oz..............................7.95

IDEAL FOR HAMS, CB, LANGUAGE LABS AND SWL'S

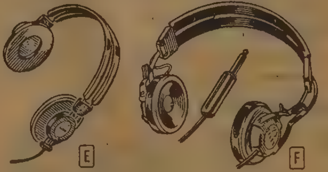
FULL-FIDELITY HEADSET



- Wide-Range Response for Music
- Choice of 4 or 600 Ohms

Model 820-02. Attractive headset reproduces the entire orchestral spectrum with amazing fidelity. Ideal for music course, libraries, etc. Weighs only 10 oz., for over-head or under-chin wearing. Frequency response: 50-18,000 Hz. Impedance: 4 ohms. Hi-impact plastic with vinyl-covered spring steel headband, removable circumaural ear cushions. With 6′ cord, molded plug.
17 A 6285. Shpg. wt., 1 lb........9.95

17 A 6286. Model 820-04. Same as above, but 600 ohms. Wt., 1 lb...13.25



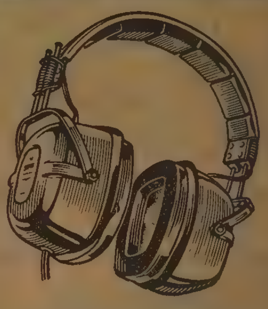
E LOW-COST DUAL HEADPHONES

Low-cost headphones provide faithful sound reproduction. Lightweight, comfortable; adjust to fit anyone. Removable ear cushions. With 5′ cord, ¼″ phone plug. Wt., 1 lb.
17 A 6220. Model 610-2. 2000 Ohms...6.95
17 A 6221. Model 610-1. 600 Ohms....6.95

F "TELESET" HEADPHONES

HM-100. Quality dual headset is ideal for Amateurs, CB'ers, shortwave listeners, others. Magnetic element for speech clarity. Adjustable spring-type stainless steel headband. Response: 50-10,000 Hz. Impedance: 2000 ohms. With 5′ cord, ¼″ phone plug.
17 A 6275. Shpg. wt., 8 oz..........14.50
17 A 6276. Model HM-500. Same as above, but 500 ohm impedance. Wt., 8 oz...14.50

SUPEREX HEADPHONES

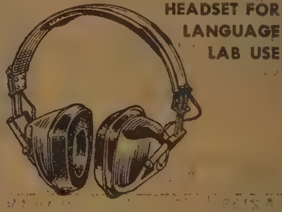


AVIATION/MARINE HEADSET

- High Intelligibility in Noisy Areas
- Lightweight and Comfortable
- 10′ Retractable Cord with Plug

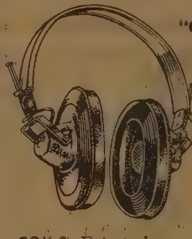
AV-NS-7. "Noise Shield" phones provide maximum intelligibility in high noise areas. Outside noise is attenuated up to 50 dB. Lightweight and comfortable, even when wearing glasses. Contoured, foam ear cushions, spring steel headband. Response, 40-15,000 Hz. 600 ohms. 10′ retractable cord, phone plug.
17 A 6291. Wt., 3 lbs........45.00
17 A 6292. SX-NS-7. Above, 4-16 ohms; 7′ straight cord........40.00

HEADSET FOR LANGUAGE LAB USE



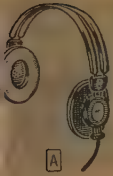
AP-S. Lightweight headset for prolonged use in language labs and for communications. Vinyl-covered ear cushions. Frequency response: 80-12,000 Hz. Factory connected for hi-impedance 600-ohm output. Leads may be changed to 4-16 ohms. Supplied with 7′ 4-conductor cord, ¼″ phone plug. Shpg. wt., 3 lbs.
17 A 6302..................24.95

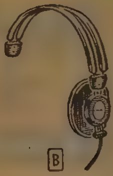
"COMMUNICATOR" HEADSET

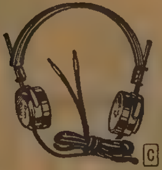


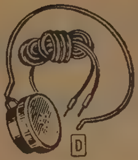
COM-S. Extremely sensitive headset for all communications use. Lightweight, fully adjustable headband; vinyl-covered foam filled ear cushions. Dynamic elements for crisp, clear reproduction. Response: 100-10,000 Hz. Impedance: 4-16 ohms. Supplied with 7′ two-conductor cable with ¼″ phone plug. Shpg. wt., 1 lb.
17 A 6309...................13.95

Lincoln Headphones..Quality at Low Prices









A DELUXE DUAL HEADPHONES

xcellent quality for Amateurs, CB'ers. ightweight, with vinyl-covered double eadband. Adjustable earpieces have re-ıovable ear-encompassing cushions that lock out distracting noise from surround-ıg area. Heavy-duty 5′ cord with stand-rd ¼″ phone plug, Gray. Shpg. wt., 1 lb.

7 A 6227. 2000 Ohms..........5.95

7 A 6226. 8 Ohms..........5.95

B DELUXE SINGLE HEADPHONE

eluxe headphone for receiver monitor-ıg and other uses. Perfect for mobile CB, nce some States permit only a single hone for mobile operations. Vinyl-cov-red headband. Comfortable earcushion removable. Impedance, 1000 ohms. 5′ ord with standard ¼″ phone plug.

7 A 6228. Shpg. wt., 1 lb..........5.95

C LOW-COST DUAL HEADPHONES

General-purpose headphones for Amateurs and shortwave listening. Vinyl-covered double headband with easily adjustable yokes. Hyflux Alnico magnets. 1⅞″ diaphragm. 4½-foot cord with phone tips. Terminals are inside earpiece. Wt., 1 lb.

17 A 6083. 2000 Ohms..........2.95

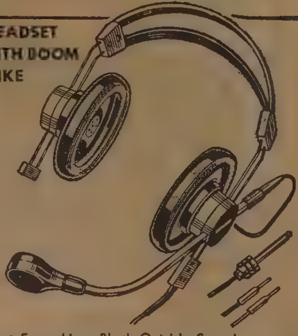
17 A 6215. 11 Ohms. Same as above, but with standard ¼″ phone plug......3.50

D LOW-COST SINGLE HEADPHONE

Dependable headphone, suitable for hard-of-hearing installations, receiver and crystal set monitoring. other applications. 1⅞″ diaphragm. 4½-foot high-quality cord with phone tips. Spring-metal headband, permanently attached. 1000 ohms impedance. Shpg. wt., 8 oz.

17 A 6085...........1.50

HEADSET WITH BOOM MIKE

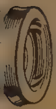


- Earcushions Block Outside Sounds
- Lightweight, Can Be Worn for Hours
- Sensitive Ceramic Boom Mike

Lightweight dual headset with boom mike for Hams, CB'ers, language labs, many other uses. Earpieces have extra-heavy-duty magnets for clear voice reproduction. Vinyl-covered headband, adjustable earpieces. Removable, washable ear-cushions. Cord has phone plugs for hi-Z mike and 2000 ohm headset. Gray. 1½ lbs.

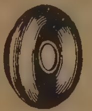
17 A 6230..........17.95

LOW-COST HEADPHONE ACCESSORIES



Vinyl Ear Cushions. Ear-encompassing—reduce external noises to a minimum. Fit standard earpieces. Provide maximum comfort for long hours of use. Washable vinyl covering. Shpg. wt., 2 oz.

17 A 6203...........Per Pair 70¢

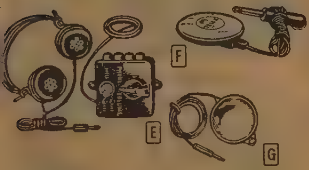


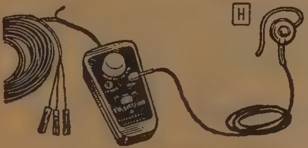
Rubber Earphone Cushions. Provide comfortable listening over long periods and reduce external noise. Washable. Fit standard earpieces. Wt., 3 oz.

17 A 6103. 1-9 Pairs..........Per Pair 65¢

10 or More Pairs..........Per Pair 60¢

PRIVATE LISTENING DEVICES FOR TV, HI-FI AND INSTITUTIONAL USE





E CANNON HEADPHONE SET

llows you to listen privately. Also can e operated with speaker. Aids hard-of-earing. Control box has volume control nd speaker/phones switch. Includes dual eadset, control box, 15′ cord.

7 A 6135. Shpg. wt., 2 lbs..........7.95

F THORO TEST PILLOW SPEAKER

S-8. Audible only to the user. Allows rivate listening anywhere. May be used ith transistor radios or across voice coil eads with other speakers. Inpedance, 8 hms. With 6-foot cord and miniature hone plug. Size, ⅝x2¼″.

7 A 6092. Shpg. wt., 6 oz..........3.95

G TELEX PILLOW SPEAKER

DN-2A. Provides outstanding sound fidel-y for private listening through a pillow r held close to the ear. VA hospital ap-roved. Stainless steel, easily sterilized. Dynamic speaker has handy hanger ring. .2 ohms impedance. Insulated. 1⅛x ¾″. 5′ cord, std. ¼″ phone plug.

7 A 6246. Shpg. wt., 12 oz..........6.95

H TELEX PRIVATE LISTENERS

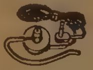
LCP-93. For private TV, radio, monophonic hi-fi listening. For hard-of-hearing, too. Volume control. Jacks for 2 earpieces—one is for standard ¼″ phone plug. 15-foot cord with miniature plug Includes one earpiece. Wt., 1 lb.

17 A 6231...........9.50

LCP-90. Similar to above, but has jack for miniature plug. Includes on-off speaker switch. 15-foot cord with spring clips. Includes one earpiece. Wt., 1 lb.

17 A 6234...........9.95

17 A 6281. Extra Earpiece. ¼ lb..........2.95



REPLACEMENT EARPHONES

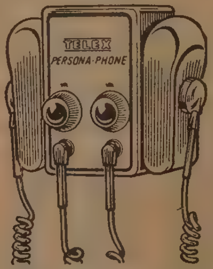
Model 21-200. Single earphone. Impedance, 10 ohms. 46″ cord; rt.-angle plug, ⅛″ dia. with ⅝″ shank. Japan.

17 A 6307. Shpg. wt., 4 oz..........50¢

Model 21-205. Above, but 2000 ohms, with straight ⅛″ dia. plug. Japan.

17 A 6308. Shpg. wt., 4 oz..........89¢

TELEX PERSONA-PHONE PRIVATE LISTENER FOR AUDIENCES



- Two Earsets—Separate Volume Controls
- Lets Each Listener Hear Clearly
- Connects Easily to Sound System

Compact dual-receiver unit provides individual listening for institutional audiences. Ideal for churches, theaters, museums, exhibits, libraries—wherever listeners might have trouble hearing.

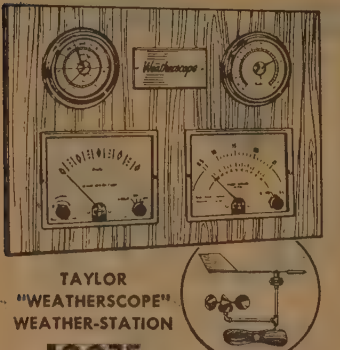
Has two earsets, each with its own volume control, so user can adjust sound to suit himself. Earshells fit all listeners, even those who wear glasses; will not disturb ladies' hairdos.

Earsets have 5-ft. coil cords, hang up on control box when not in use; weigh less than 1.5 oz. Operates from institution's 70-V, 25-V, or 8-ohm PA system. Internal matching transformer and terminal strip. Gold color. 4¾x3⅞x2 7/16″.

17 A 6290. Shpg. wt., 5 lbs..........34.00

See Pages 102-104 for Stereo Hi-Fi Headphones

Accurate Instruments Let You Forecast Weather



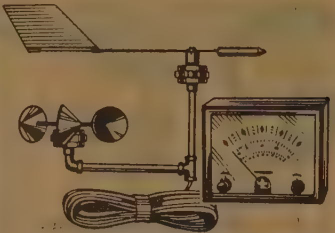
TAYLOR "WEATHERSCOPE" WEATHER-STATION

199.75

- Barometer Shows Pressure and Forecast
- Outdoor Thermometer Shows High and Low
- Wind Speed and Direction Indicators

Complete home weather station gives you the information you need to let you make your own forecasts. Four instruments on handsome 17x52″ walnut panel: barometer, outdoor thermometer that shows maximum and minimum temperatures, wind speed and wind direction indicators. Instruments have brass bezels.

With 60′ cable for outdoor wind vane and anemometer (included), 20′ capillary tubing for outdoor thermometer. Panel mounts easily on the wall. Includes battery and complete instructions for installation.
17 A 6860 X. Shpg. wt., 17 lbs.. . 199.75



TAYLOR WINDSCOPE WIND SPEED AND DIRECTION INDICATOR

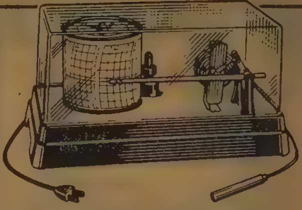
89.95

- Self-Contained
- Easy to Install
- 60-ft. Lead-in

Compact unit shows wind speed or direction selected by 2-position knob. Self-contained; no external power source needed. Outdoor parts are corrosion-resistant. Indoor indicator is 6½x5″, with attractive mahogany finish. Includes outdoor wind vane, anemometer, 60′ cable, battery, instructions.
17 A 6851 X. Shpg. wt., 10 lbs......89.95

WIND SPEED INDICATOR. Similar to above, but shows wind speed only on double scale, 0-25 and 0-100 miles per hour. Mahogany finish case, 6½x5″, for desk or wall mounting with 60′ cable, complete instructions.
17 A 8361 X. Shpg. wt., 3½ lbs.....69.00

WIND DIRECTION INDICATOR. Shows wind direction only, with major compass points on easy-to-read scale. Mahogany finished case, 6½x5″, for desk or wall. Includes 60′ cable, battery, instructions.
17 A 8358 X. Shpg. wt., 4 lbs.......69.00

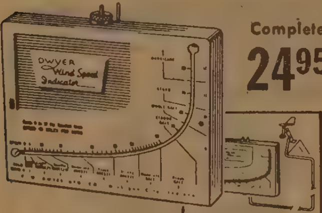


TAYLOR 7-DAY RECORDING INSTRUMENTS

Barometer or Thermometer

BAROMETER. Provides a record of 7-days variations in barometric pressure. Range: 29-31 inches, correctible from sea level to 10,000 feet. Sensitive UNI/MAG movement. 6¾x13x6¾″. With 13 charts, ink, instructions. 115 V, 60 Hz AC.
17 A 6861 X. Wt., 5 lbs........49.95

THERMOMETER. Provides 7-day record of outdoor temperature, —40° to +120° F. 6¾x13x6¾″, With 8′ capillary tubing, 13 charts, ink, instructions. For 115 V, 60 Hz AC.
17 A 6862 X. Wt., 5 lbs........49.95



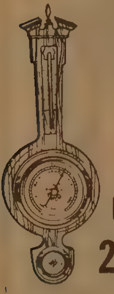
Complete **24.95**

DWYER WIND SPEED INDICATOR

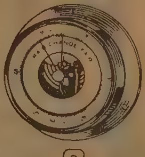
Highly accurate wind speed instrument at a low price. Made for easy installation and easy reading. Liquid-filled tube reads like a thermometer—no calculations necessary. Easily read scale is calibrated in both 0 to 80 miles per hour and Beaufort scale designations.

Outside fitting, resembling a weather vane, mounts on any elevation; attaches to meter by 50-foot vinyl tubing (supplied). Indicator size, 6x7x1″.
17 A 6538. Shpg. wt., 5 lbs..........24.95

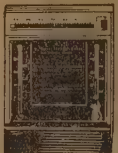
WEATHER INSTRUMENTS FOR HOME OR OFFICE



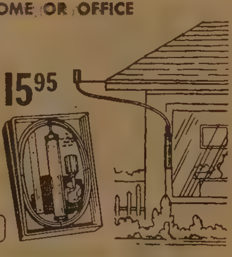
A **24.95**



B **59.95**



C **11.95**



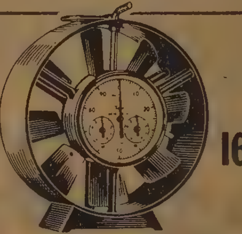
15.95 D

A **TAYLOR STATESMAN STORMSCOPE.** Accurately indicates temperature, pressure and humidity. Warns of storms, helps you regulate room heat and humidity. Colonial-style mahogany pendant, 21½x7¼″, with brass trim—a lovely addition to your home.
17 A 6853 X. Shpg. wt., 3 lbs.......24.95

B **TAYLOR DELUXE BAROMETER.** Navy-type instrument for wall mounting. Features compensated movement for extremely precise readings. Handsome, heavy spun brass case. Reads 26 to 31″ pressure on 5″ dial, with 6¾″ flange diameter; indicates actual pressure between 0 and 3500 feet.
17 A 6864 X. Shpg. wt., 2½ lbs.... 59.95

C **TAYLOR HYGROMETER.** Wall-type humidity instrument gives accurate reading of percentage of atmospheric moisture in your home. Thermometer shows temperature, 40° to 110° F. Translucent water reservoir. Revolving humidity table. 5x7″.
17 A 8355 X. Shpg. wt., 1 lb.........11.95

D **PIONEER RAIN MINDER.** Precision rain gauge accurately measures up to 5″ of rainfall. Easy-to-read gauge mounts on outside window facing; 2″ collector cup mounts on roof gable, connected to gauge by 20-foot plastic hose (included). With mounting brackets and complete instructions.
17 A 6866 X. Shpg. wt., 2½ lbs.....15.95

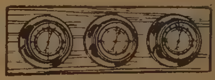


160.00

TAYLOR PRECISION BIRAM'S ANEMOMETER

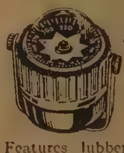
Shows wind velocities from 200 to 3000 feet per minute. Three dials give readings to 10,000 feet. Jeweled movement, automatic zero set, disconnector. 4″ diameter. With carrying case, correction chart.
17 A 8984 S. Wt., 2½ lbs.....160.00

8.95



3-in-1 WEATHER STATION

Shows temperature, barometric pressure, relative humidity. Warns of approaching storms. Dials turn 90° on wood grain panel for versatile mounting. Size, 5¾x15½″.
17 A 6855. Wt., ½ lb.........8.95



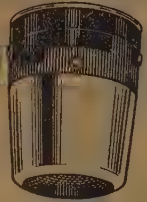
TAYLOR MARINE COMPASS

14.95

Features lubber line and jeweled bearing for accurate readings. Rotatable dome, 5° graduations, illuminated dial. Black plastic case, 3x4″. Complete with hardware.
17 A 6870. Wt., 1½ lbs.......14.95

Protect Your Property with These Alarms

SPECO CHEMICALLY SELF-POWERED HOME FIRE ALARM

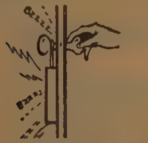


- Compact and Powerful
- Requires No Batteries Springs or Electricity
- Constantly Vigilant
- Sounds for Two Hours
- Activates at 135° F

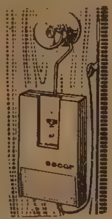
Install the Fire Guard about 2′ from ceiling or over the door, using special mounting bracket included with the unit. Fire Guard's sensor will activate alarm at 135° F. Red chemical is released into the electronic energizing section which powers the alarm. The alarm will continue blasting for at least 2 hours. Requires no maintenance; hermetically sealed. 2½x2″ dia.

26 A 1976. Shpg. wt., 1 lb.............6.95

"SECUR" SOLID-STATE DOOR INTRUDER ALARM



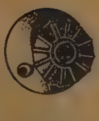
Buzzes Before Entry Is Gained



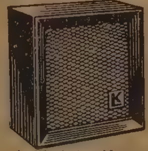
Provides protection in the home; great for hotels and motels when you're on vacation. Compact portable solid-state door alarm hangs on inside doorknob. Easy to install——simply plug into AC outlet and turn the alarm on. Sounds with shrill buzzing noise if anyone touches doorknob. Warns you of prowlers before entry is made. Safety clip will sound alarm even if door is forced open without touching doorknob. Has no moving or breakable parts. With illuminated on-off switch. Handsomely styled case is made of durable high-impact plastic. Size, 8x4x1½″ thick. U.L. Listed. For 117 VAC.

26 A 2167. Shpg. wt., 2 lbs..........19.95

KIDDE HOME FIRE ALARM



Heat Detector



Alarm System

MODEL HS-12. Dependable fire-alarm panel provides adequate protection against fires, excessive heat, etc., when used with heat detector listed below. Has powerful dual-horn alarm for loud, easily identifiable tone. Solid-state circuit assures reliable operation. Self-contained.

Detector automatically rearms itself after cooling, and power is resumed. Has pilot lights which indicate location of fire at a glance. Lock-in circuit keeps alarm ringing even after it cools. Silent switch releases lock-in to restore system.

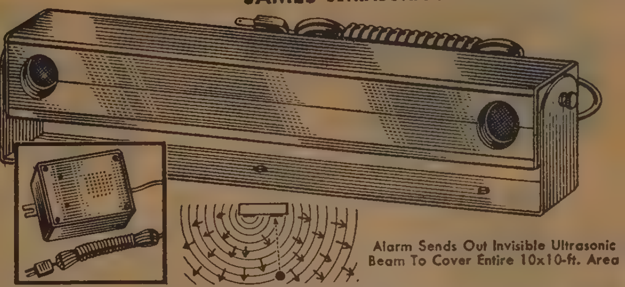
Can also operate remote bells or lights. Recommended installation is six to eight feet from floor. Handsomely styled case. Size, 6x5x3″. Requires 6-volt battery. Order heat detector and cable below.

26 A 2102 X. Wt., 6 lbs.............39.95

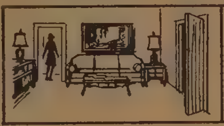
26 A 2103. Heat Detector. Automatically activates alarm in presence of extreme heat. Shpg. wt., 8 oz.............3.95

55 A 7602. 100′ Cable. Two-conductor. 18 gauge. Shpg. wt., 2 lbs.............3.45

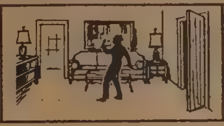
JAMES ULTRASONIC INTRUSION ALARM



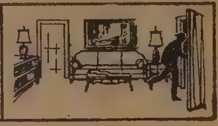
Alarm Sends Out Invisible Ultrasonic Beam To Cover Entire 10x10-ft. Area



Turn On Alarm When You Leave—Unit Arms In Less Than A Minute



When Intruder Enters Alarm Turns On Lamps Or Floodlights



Built-in Brief Delay Permits Owner Turn-Off

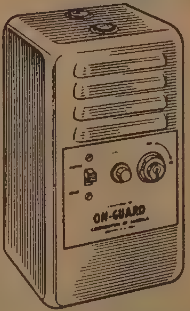
MODEL C-7350. Solid-state alarm system provides effective safeguard against intruders by use of the same principle that has been successfully used in banks, detection agencies, industrial plants and other security installations. Silent, invisible ultrasonic beam provides up to 100 square feet area protection. Alarm can be connected to turn on lights, sound buzzer or bell, or send remote signals which indicate a moving object crossing the beam. Useful in protecting entranceways, stairwells and exit areas. Ideal for apartments, homes, offices or shops. Install the unit anywhere, aiming it over the area you wish to protect, while keeping the front of the unit unobstructed.

When used in a car, alarm can be set off instantly when car door is opened. On/off switch has reset with 60-second delay. Variable sensitivity control permits adjusting the ultrasonic beam further from or closer to the unit for more effective area coverage. Alarm output may be wired for 110-130 volts at 100 watts for direct connection of lamps, horns, buzzers, etc.; or 1-amp switch, for connection of units with their own power supplies, 12-volt units, etc. Dependable solid-state circuit for long life and reliable operation. Size, 2x14x2″. For 110-130 volts, 60 Hz AC. Order optional detector accessories, window switch and outdoor bell from listing below.

26 A 2281. Shpg. wt., 3 lbs..............................99.50

22 A 3342. C-7363 Heat and Fire Detector. Activates alarm when temperature exceeds 134° F. 2x2x3″. Shpg. wt., 1 lb...............................2.95
22 A 3341. C-7364 Smoke Detector. 5x7x2″. 117 VAC. Wt., 3 lbs...............9.95
22 A 3344. C-7365 Flood Detector. Needs #2U6 9-V battery. 2x2x3″. Wt., 1 lb.........5.95
22 A 3340. C-7361 Window Switch. 3x2x1″. Wt., 8 oz....................2.95
26 A 3117. C-7511 Outdoor 6″ Bell. 117 VAC. Wt., 6 lbs..................21.95

ON-GUARD SOLID-STATE BURGLAR ALARM



- Fits All Doors—Tamperproof from Outside
- No Wiring Needed—Runs Off Long-Life Battery
- Self-Contained Unit Mounts in Minutes
- Exit Button Lets You Open Door from Inside —Alarm Resets Itself When Door Is Closed
- Heavy-Gauge Anodized Aluminum Case

MODEL DA-4. Night and day, at home or away, your On-Guard burglar alarm is always ready to keep intruders out. Dependable alarm requires no special wiring; solid-state circuit runs on long-life battery. Especially easy to mount on any door. Requires no lock hole in the door and is completely tamperproof. Self-contained in aluminum case which retains its good looks for years of dependable service in homes, apartments, stores and offices.

Instant or delay switch lets you program the alarm for several modes of operation. Key-type alarm switch. With switch set to "instant" and key "on" alarm will blast its shrill sound when door is opened. Exit button permits exit or entry without setting off alarm which automatically resets itself when door is closed. With switch to "delay" and key "on" alarm will sound twenty seconds after entry unless key is inserted to reset alarm within that time. With key "on" and switch in either position, alarm button may be pressed to discourage annoying salesmen or signal for aid.

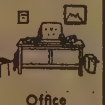
Anodized aluminum case has attractive neutral sand-color finish. Size, 4½x8x3″. With battery, 2 keys and decals.

26 A 1984. Shpg. wt., 5 lbs.............39.95

Home

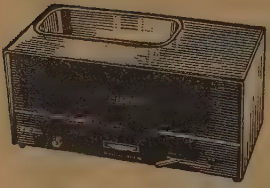
Apartment

Store



Office

Electromation Ultrasonic Home Cleaners



Save $35.05

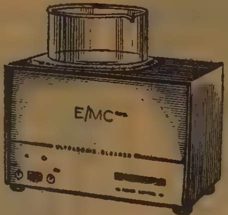
89^{95}

Was $125.00

MODEL BP-1 HEAVY-DUTY 1-QUART CLEANER

Heavy-duty ultrasonic cleaner ideal for removing grease, tar, wax and other elements from housewares. Large 1-quart capacity. Cleans inaccessible areas. Also for continuous operation in cleaning miniature components and mechanisms, instruments, and an infinite variety of precision parts. Automatic 5-minute time switch; power dial for low and high power. Stainless steel top, sides, tank cannot be marred by normal cleaning agents. No tubes or transistors for easy and durable operation. Operates at 90 kHz nominal, 50 watts radio frequency input. Lead titanate crystal, 280° fahrenheit. Convenient console size is only 11¾x6½x5 inches. Large tank size, 8x3½x2½ inches. For 115 volts. 50-60 Hz AC.

26 A 3696. Shpg. wt., 7 lbs.......................................89.95



MODEL LP-2 ECONOMY COMPACT CLEANER

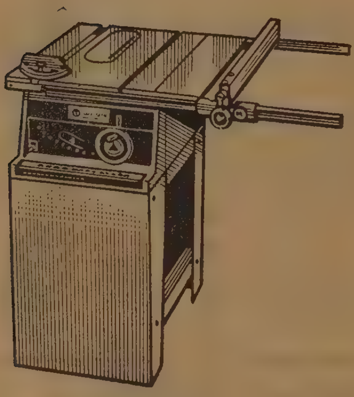
39^{95}

- Removable Crystal Beaker
- Automatic Overheat Shutoff
- Proven Cleaning Technique
- Cleans Inaccessible Places

Excellent value in a highly useful ultrasonic cleaner for all types of delicate and intricate housewares. Gets to inaccessible places even brushes and files miss. Has convenient crystal beaker for objects to be cleaned; stainless steel cabinet. Beaker can be easily removed, refilled and replaced without moving basic cabinet. Cleaning liquid operates at 90 kHz. Has automatic heat cutoff to protect delicate objects from damage. Beaker is a full 3″ diameter by 1½″ deep, can accept full set of dentures. Holds up to ⅓ pint cleaning fluid. Outfit includes sample bottles of jewelry cleaner; denture cleaner; silver/gold coin cleaner; copper/brass coin cleaner; plastic sponge. Cabinet size, 6x4x4″. For 115 V, 60 Hz AC.

26 A 2108. Shpg. wt., 6 lbs.......................................39.95

ROCKWELL CIRCULAR, SCROLL AND BAND POWER SAWS WITH STANDS



DELTA 9″ MOTORIZED CIRCULAR SAW WITH 6000-RPM 2 HP MOTOR

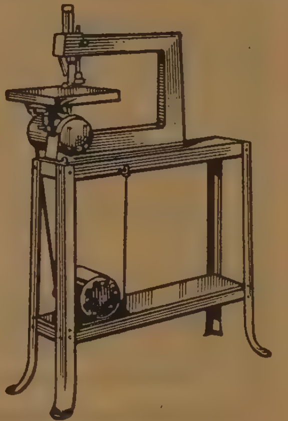
- On-Table Blade Adjustment
- Centralized Fingertip Control
- Extra Wide Extension Wings—22x26″

Model 34-628. Big-capacity saw for ripping, cross-cutting, mitering, beveling, and tenoning. Completely enclosed drive mechanism for added operator protection. Sealed ball bearing construction for longer maintenance free operation. Cuts stock 2⅞″ thick at 90° and 2 1/32″ at 45°.

Self-aligning rip fence with up-front controls automatically, aligns itself parallel to the blade as it is locked to the guide bars. Ripping is a full 24″ right or left blade. Two developed hp motor with 6000 RPM speed for smoother and safer operation. Manual reset thermal overload device protects motor against excessive overloading conditions. Under-table widely spaced trunnions that solidly support the motor and drive mechanism for greater cutting accuracy.

Control adjusts blade tilt from 0° to 45°, handwheel to set desired depth of cut and level that securely locks blade in selected operating position. With 2 hp motor, switch and cord set, drive belt, rip fence, guide bars, miter gauge, combination saw blade, table insert. 30x12x34″. 117 VAC.

26 A 1527 ZF. Shpg. wt., 90 lbs....174.95



16″ SCROLL SAW CUTS THROUGH WOOD UP TO A FULL 2″ THICK

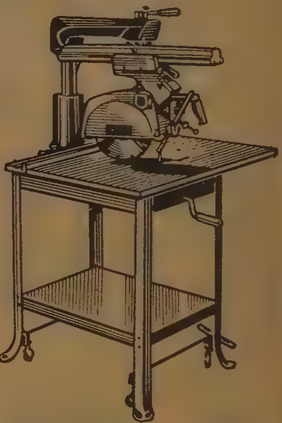
- Table Tilts 45° Right and 15° Left
- Handles Intricate Work to Heavy Stock
- Full 16″ Arm to Blade Capacity

Model 40-069. Can handle anything from fine intricate work to heavy stock. Takes stock to a full 2″ thick. Offers full 16″ arm to blade capacity. Table tilts 45° right and 15° left for angle or bevel cutting jobs. Features Universal V-Jaw Chuck for positive grip of blades.

Spring hold-down holds work firmly against table. Can be tilted with table for angle cutting operations. Heavy ribbed, big 11x11″ tilting table is supported by two trunnions centrally located under work load. Degree calibrated scale facilitates angle settings. Bronze bearing crank shaft is automatically lubricated through a unique splash system in the crank case.

V-belt is designed to make perfect contact with side of V-groove. V-belt transmit maximum power with minimum slip. Cords are saturated with pure liquid rubber, imbedded in special rubber stock which resists fatigue and carries off heat. Includes 3 saw blades, 40-100 saw, 50-717 40″ stand. 20¾x12¼x26″. Order motor below.

26 A 1543 ZF. Shpg. wt., 117 lbs. . . 99.50
26 A 3788 ZF. ½-hp AC Motor. 30 lbs. 39.95



10″ BAND SAW CUTS THROUGH WOOD UP TO A FULL 6¼″ THICK

- 10x11″ Table Tilts a Full 45°
- Tensioning and Tracking Controls
- Full 9⅝″ Frame-to-Blade Capacity

Model 28-069. For big capacity, straight line sawing and curve cutting jobs too big for other type saws to handle. Handles all jobs from resawing to fine scroll work. Cuts stock a full 6¼″ thick. Offers 9⅝″ frame-to-blade capacity. 10x11″ table tilts a full 45°. Degree scale facilitates angle setting and stop screw makes leveling easy.

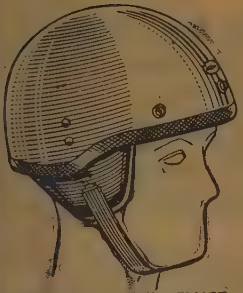
Upper and lower blade guides and ball bearing blade supports are adjustable for various types and size blades, assuring longer blade life and minimizing blade breakage. Sliding blade guard covers blade completely except portion which does the cutting. Band saw wheels are also covered for maximum safety. Tensioning and tracking controls provide accurate means of correcting blade alignment and maintaining correct tension.

V-belt transmit maximum power with minimum slip. Saturated with pure rubber and imbedded on special rubber stock. With Wheel Guards, machine pulley, 28-803 ¼″ blade. 50-328 42″ stand. 10⅝x18¼x32¾″. Order motor below.

26 A 2147 ZF. Shpg. wt., 111 lbs. . . 114.95
26 A 3788 ZF. ½-hp AC Motor. 30 lbs. 39.95

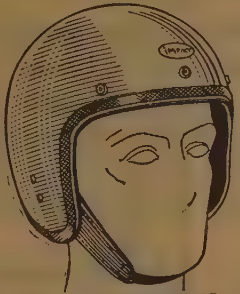
Saws and AC Motors shipped from Syracuse, New York

Custom Styling Automotive Accessories



SWINGER SEMI-JET HELMET

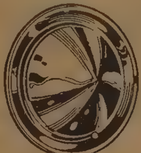
Swinger Crash Helmet features omfortable interior foam crown ad and size padding. Incorporates 'V" hold-down harness. "D" ring or strap adjustment. Gloss white. Tough outer shell of lightweight iberglas. Meets MS&-ATA and USASI Z90.1 standards. Snell Foundation approved. **Specify size: 6¾ to 7; 7⅛ to 7¼; 7⅜ to 7½.**
19 A 4139 C. Wt., 3 lbs.....12.95



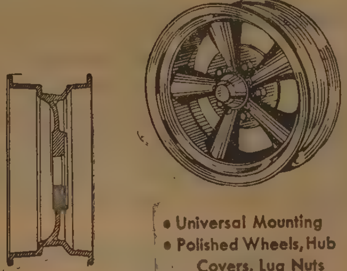
FULL JET CRASH HELMET

Impact Full Jet Crash Helmet features contoured padded ear cup and crown padding. "D" ring adjustable hold-down strap. Outer shell of tough fiberglas. Certified to MS&-ATA and USASI Z90.1 standards. Approved by AMA and Snell Foundation. **Specify size: 6¾ to 7; 7⅛ to 7¼; 7⅜ to 7½. Specify: Gloss White, Metalflake Red or Blue.**
19 A 4140 C. Wt., 4 lbs.....22.95

CUSTOM STYLE CHROME-CONE WHEEL COVERS



Give your car the sleek sporty look the easy and low cost way. Install a set of these beautiful, sparkling wheel covers. Brilliant triple chrome finish over deep drawn quality steel. Cone shaped for spectacular spinning effect. Perfect tight fit for any year and model car with 14" or 15" wheels. Easy to install, just snap on. Shpg. wt., 12 lbs.
19 A 4141 X. 14" Wheel Covers.....(Set of 2) 5.95
19 A 4142 X. 15" Wheel Covers.....(Set of 2) 5.95

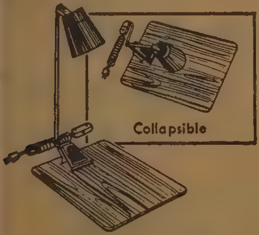


- Universal Mounting
- Polished Wheels, Hub Covers, Lug Nuts
- One-piece Casting

HIGH-PERFORMANCE SLOT-MAG WHEELS WITH ONE-PIECE ALUMINUM ALLOY DESIGN

Transform your car into a hot-looking street machine with International's polished Slot-Mag Wheels. Recently developed production method brings you the strongest mags ever cast. Tough as iron, yet lighter than steel wheels. Overdesigned for the most rugged competition and street usage. Dial-fit universal mounting system allows Slot-Mag to be interchangeable, wheels can be transferred from one car to another with no visible adapters. With hub cover and lug nuts. **Specify year, make and model of car when ordering.** Shipped from California.

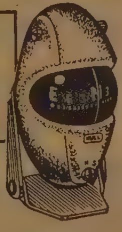
Stock No.	Wheel Size	Shpg. Wt.	EACH
19 A 4143 CF	14x6", 14x7" 15x6", 15x7"	20 lbs.	49.95
19 A 4158 CF	14x8", 15x8½"	22 lbs.	56.95



CLIP BOARD LAMP

Portable lamp includes writing pad and paper clipper. Great for family car, road rallies, business notes, etc. Lamp turns 360° right and left, 90° up and down. Wood grain finish board. 11⅓ ft. cord, plug for 12-volt lighter outlet. 12-volt, 15 cp lamp. Shpg. wt., 2 lbs.
19 A 4144 X................5.95

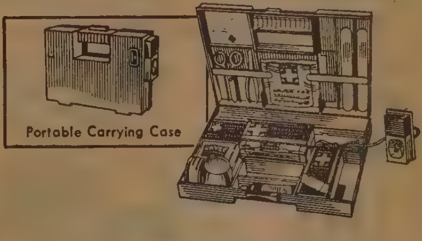
- Fits and Works in any Car
- 360° Accuracy
- In Leather-Like Case



HULL CUSTOM LINE COMPASS

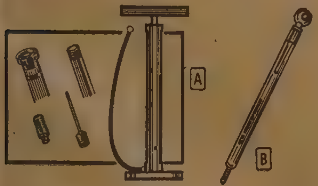
Model 700-DM. Calibrated dial. Adhesive speed mounts. Extremely accurate. Compensating system.
19 A 4145. Wt., 1 lb.........4.95

Model 810-DM. Same as above but with removable flashlight for dial illumination. With "AAA" battery.
19 A 4146. Wt., 1 lb..........5.69



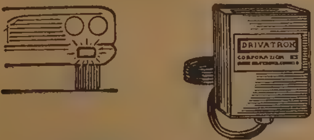
PORTALITE FIRST AID STATION WITH LIGHT

Model MSA-120S. Compact, lightweight, portable . . a "must" for the motorist, homeowner, boatsman or camper. Includes items necessary to meet most minor emergencies. Features flashing red warning light and white utility light combination, plus first aid book on minor injuries, gauze pads, cotton, surgical tape, splints, tweezers and others for a total of fifteen vital supply items. In plastic case, 10½x7¼x2¼". Requires 2 "D" batteries.
19 A 4149. Shpg. wt., 2 lbs.......................4.98



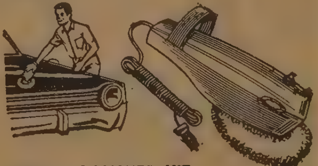
A All Purpose Air Pump. Four-in-one pump can be used to inflate tires, footballs and basketballs. With four air fittings.
19 A 4150. Shpg. wt., 5 lbs..........1.98

B Safe-Air Tire Gauge. Calibrated 10-50 lbs. Include 4 valve caps. For autos, bicycles and other uses. All metal.
19 A 4151. Shpg. wt., 4 oz.............98



DRIVATRON DRIVING LIGHTS ADAPTER

Now you can convert your car's lights to work like latest models. Parking lights work with headlights for the latest in style and safety. Solid-state electronics. Easy to install—just connect two wires. Can be connected to work with lo-beam headlights or lo and high-beam headlights.
19 A 4154. Shpg.wt., 8 oz.........2.98



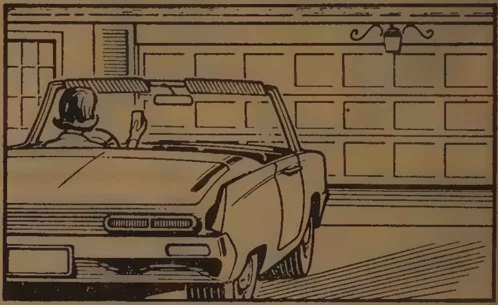
METRO POLISHER KIT WITH SANDING DISC

Model AP100. Auto polisher kit allows you to keep that new car look. Includes lambswool bonnets and car polish for buffing and polishing. Has scrub brush for cleaning. Has sanding disc and sandpaper. Automatic eject button. Push button operation. 20-ft. cord and plug for 12-V lighter outlet.
19 A 4155. Shpg. wt., 5 lbs.........14.95

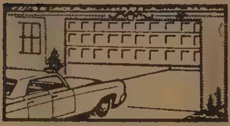
Don't Struggle with a Big, Heavy Garage Door!

Open, Close and Lock Your Door, Turn-on Garage Lights by Remote Control from Your Car, Up to 100 Feet . . Not a Luxury, but a Practical Appliance Important for Your Convenience and Safety

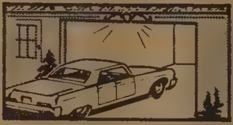
IN YOU RIDE . . .



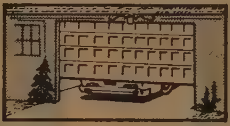
. . . YOU'RE SAFE INSIDE



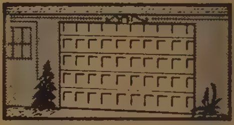
OPENS DOOR . . . *Just Press Button on Transmitter*



OPERATES LIGHT . . . *Light Is Turned On, Off Automatically*



CLOSES DOOR . . . *Press Button Again . . . Door Closes*



LOCKS DOOR . . . *Door Locks Securely When Fully Closed*

Perma-Power "Liftmaster" Chain-Drive Garage Door Openers

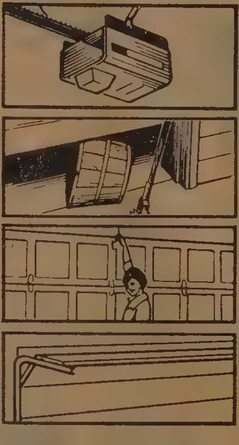
Easily Installed Solid-State Systems

Deluxe System

149^{50}

$8 monthly
see page 438

You Open and Close Garage Door From Inside Your Car. You Don't Leave Your Children Alone in the Car; You Don't Get Wet or Cold in Nasty Weather; You're Safe From Prowlers. You Don't Risk Straining Your Back Trying to Raise a Heavy Garage Door.



Power Unit with "Velvet-Glide." Powerful ⅓-hp chain-drive easily handles 20-ft. wide residential garage doors weighing up to 200 lbs. with either horizontal or curved roller tracks. "Velvet Glide" electronic clutch provides smooth, quiet, dependable operation. Accelerates from a dead stop without jerking or bouncing. Saves on your nerves as well as your back.

Instant Stop Control. Safety feature protects your family and pets. Door travel is *instantly* stopped by the button on the transmitter or by the inside door control. Door stops *automatically and instantly* if it encounters any obstacle. Model G-6101, when started again, reverses and pulls away, the ultimate safeguard against trapping any person, pet, or misplaced object.

Manual Operation of Door. No need to worry about your car being locked in or out during a chance power failure. If, for any reason, the power should fail, the motor-driven door arm can easily be detached to allow manual operation of the door until power is restored. Absolutely no tools are required for detaching. It is very simple and can be done by anyone.

Easy to Install. The Perma-Power LIFTMASTER can be installed on your *existing* garage door whether it is single or double, sectional or one-piece, metal, fiberglass, or wood. No costly extras or special skills are required for installation. You need only a drill, pliers, screwdriver, and hammer. All necessary hardware and a book of easy-to-follow directions are included with door opener.

DELUXE SYSTEMS

G-6101 Deluxe Garage Door Opener. Lifts, lowers, and locks garage door; turns garage lights off and on. You get power unit, track, chain-drive, receiver, pocket transmitter, pushbutton manual control unit, antenna, and hardware. No FCC license needed. U.L. Listed. For 117 VAC.

G-6101 System with Pocket Transmitter for Channel B10P.
17 A 8007 ZW. Shpg. wt., 65 lbs. Express. **149.50**

Alternate-Frequency System. Same as above, but for different channel. Portable. Shpg. wt., 65 lbs. Express.
17 A 8012 ZF. **149.50**

BUDGET SYSTEMS

G-6121 Budget System with Pocket Transmitter for Channel B10P. As G-6101, except 175-lb. door capacity. Manual reverse, not electrical. If object obstructs door's progress, door stops instantly. Does not reverse and pull away when restarted. To reverse before completion of travel, electromechanical reverse switch must be manually reset. Series-wound ¼ hp motor, not capacitor-start motor; housing less light shield.
17 A 8001 ZW. Shpg. wt., 55 lbs. Express. **119.95**

Alternate-Frequency System. As above, different channel.
17 A 8003 ZF. Shpg. wt., 55 lbs. Express. **119.95**

EXTRA TRANSMITTERS

Extra Pocket Transmitter Channel B10P. For either G-6101 or G-6121. Shpg. wt., 1 lb.
17 A 8018. . . . . **19.50**

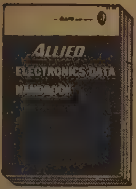
Extra Transmitter for Alternate-Frequency System. *Specify Channel.* Shpg. wt., 1 lb.
17 A 8014 CF. **19.50**

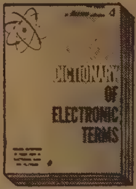
SHIPPING NOTE: Items with suffix U, W or Z in stock no. sent truck or express. See Ordering Information pages.

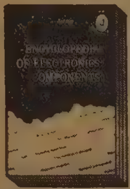
ALLIED
ELECTRONIC
HANDBOOK

Allied's Own Electronic Publications Compiled by our Technical Staff

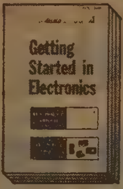
- For Hobbyists
- For Engineers
- Complete Descriptions
- Illustrations
- Easy-to-Follow Instructions







transistors
and transistor projects



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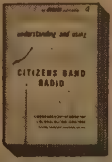

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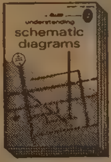

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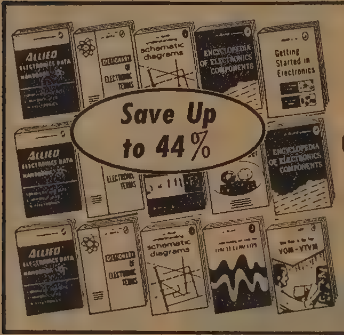

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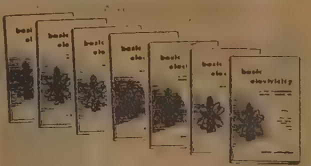

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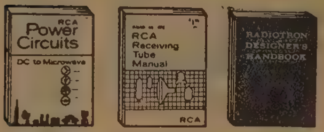

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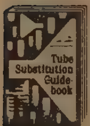

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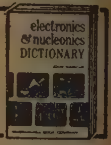

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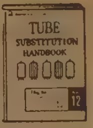

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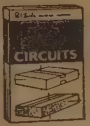

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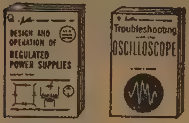
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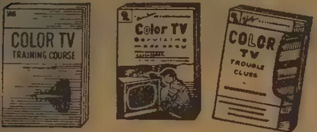

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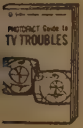

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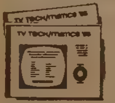

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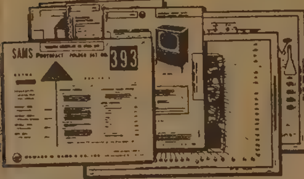

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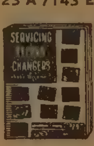

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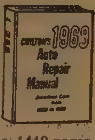

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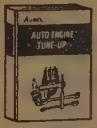

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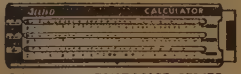

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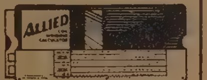

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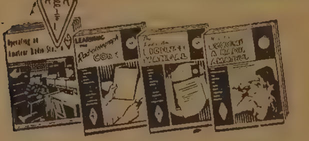

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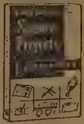

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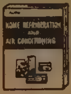
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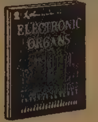

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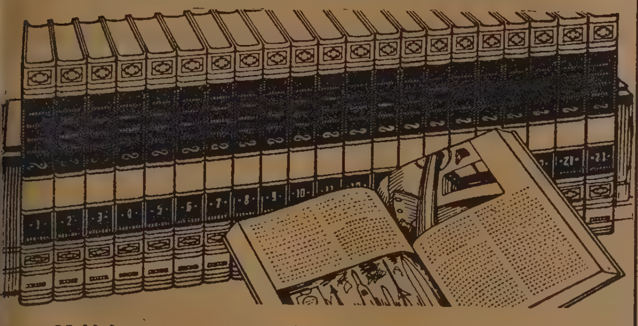

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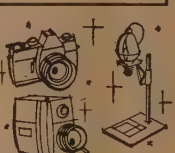

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STEP UP TO BETTER LIVING WITH ALLIED'S CREDIT FUND PLAN
ORDER WHAT YOU NEED NOW..NO DOWN PAYMENT REQUIRED

FOR ONLY $5 MONTHLY YOU CAN BUY UP TO $100.00
AND FOR $26 MONTHLY YOU CAN BUY UP TO $625.00

IMPORTANT! SEE COMPLETE CREDIT TERMS BELOW

Check here for how much you can buy and amount you pay each month

Monthly Payment Only	Unpaid Balance Buys Up To
$5	$100
$6	$120
$7	$140
$8	$160
$9	$180
$10	$200
$11	$220
$12	$240
$13	$260
$14	$280
$15	$310
$16	$340
$17	$370
$18	$400
$19	$440
$20	$480
$21	$500
$22	$525
$23	$550
$24	$575
$25	$600
$26	$625

Over $625—Monthly payments will be 1/24th of the unpaid balance.

Example:

Unpaid Balance				Monthly Payment
$1200	÷	24	=	$50

Get these 8 outstanding advantages ...

1. **No money down**—Allied makes it easy to buy and so convenient! Buy wha
you want to the full limit of your Credit Fund. Nothing to pay for 30 days. See t
below.
2. **Continuous buying power**—Your Allied Credit Fund is a sum of credit liste
Allied under your name. It's ready for your use at any time . . to buy what you
when you need it.
3. **You can take up to 31 months to pay** depending on how much you buy—
spreads your payments to make them easy on your budget. See terms below.
4. **Permanent and self-replenishing fund**—Your purchases are charged ag
your Credit Fund, but every payment you make reduces the balance due and
same time increases your credit. Your account is always ready for you to use
and over again.
5. **Make add-on purchases anytime**—No need to complete payments on a pre
purchase before making a new purchase. Just say "Charge It". After your
order, your signature on any Allied order blank is all you need to make future
chases.
6. **You always know where your account stands**—No complicated record
you to keep. You get a complete statement each month showing your purch
payments, unpaid balance, and most important—the amount of unused cred
maining in your account for Add-On purchases.
7. **Use your Credit Fund as a 30-day charge account**—There is never a se
charge when you pay in full within 30 days. See terms below.
8. **Shopping is quicker and easier**—You never have to figure freight or del
charges—we prepay them and include them in your statement to save you time
trouble. It's the simplest, fastest, most convenient way to buy what you need.

To open your Credit Fund Account . .

To enjoy the advantages of an Allied CREDIT FUND account, just fill in the app
tion on the back of our order blank and send it in with your order for credit appr
Credit Fund accounts available only to residents of the 50 United States and mem
of U.S. Armed Services overseas. No credit applications accepted from persons u
21 years of age.

Only your signature on Add-On orders .

You can "add-on" orders at any time with no money down. Just sign your ord
the space provided (minimum order $10). You can determine your monthly pay
in the following way:

1. Add amount of "add-on" order to your present unpaid balance.
2. See table at left to find monthly payment for new unpaid balance.
3. If the monthly payment is the same or less than the amount you are currently pa
no change in your monthly payment is required.
4. If monthly payment for your "add-on" order, plus your present unpaid balan
more than you currently pay, we will show the new monthly payment on your
statement.

CREDIT TERMS AND FINANCE CHARGE

Purchases are billed on a statement sent to you once each month as of a stated billing date.
that time you have the choice of paying in full or paying monthly. Your monthly payments
be determined by the amount of your balance; see the table on this page. The balance on wh
finance charges are assessed each month is the closing balance at the previous billing date
payment of this balance has been received within 30 days after the previous billing date,
finance charge is assessed. If not, the periodic rate "1½%" is applied to obtain the curr
month's finance charge, after which the current month's payments, charges, and credits
entered. Exception: When the finance charge, computed as described above, amounts to
than 50c, the month's charge will be 50c. FINANCE CHARGE: PERIODIC RATE is 1½% per mo
—50c minimum. ANNUAL PERCENTAGE RATE: The periodic rate of 1½% per month is an annual
centage rate of 18%.

See Pages 439-441 for Complete Ordering and Shipping Informa

IMPORTANT ORDERING INFORMATION

CASH ORDERS

To assure fastest delivery, please send sufficient funds (money order or check) to cover the full amount of the merchandise ordered, plus transportation charges and insurance fees. (See next two pages for full information on how to estimate transportation charges and determine insurance rates.) By including adequate transportation and insurance fees, you are assured delivery even though you may not be at home. Any excess remittance will be promptly refunded. A handling charge of 50¢ will be applied on orders of less than $10.00.

CREDIT ORDERS

For greater buying power, use Allied's Credit Fund Plan. No money down—take up to 31 months to pay—with small monthly payments. We figure and prepay transportation charges and include them in your statement. Add-on-orders require only your signature—no down payment is needed. MINIMUM ADD-ON ORDER IS ONLY $10.00. See page 438 for complete Credit Terms.

ABOUT OUR PRICES

You Pay NET Prices. Prices are net, f.o.b. Chicago, except where otherwise indicated. Our NET catalog prices are the prices you pay on shipments within the United States, and to Canada and Puerto Rico. For shipments to other countries, see "Export Orders" below. Prices, specifications and conditions of sale are subject to change without notice.

Catalog Expiration. The offerings in this catalog remain in effect until August 31st, 1970. If at that time you do not have a copy of the current Allied catalog, please send us your request for the new edition.

TO HELP YOU WRITE YOUR ORDER

Please Use Our Order Blank. To speed your order, fill in all information requested. Always show ZIP code on order blank, *and* envelope.

Method of Shipment. Depend on Allied to ship your order the best way. Items with suffix "U", "W" or "Z" in Stock No. are sent by Truck or Express. Include any special instructions on your order.

Cash Orders. On cash orders, please remit full amount for items ordered, plus transportation and insurance. Don't worry about sending too much. Every extra cent will be refunded promptly.

Shipping Weights. All weights shown in this catalog are *shipping* weights, unless otherwise indicated. Use weights in catalog and rate charts (following two pages) to determine shipping costs.

Insurance. To protect you, we insure all Parcel Post shipments with a dependable private insurance company. See page 440 for rates.

How to Send Money. Please send your remittance by Post Office or Express money order, bank draft, or check. PLEASE DO NOT SEND STAMPS.

ABOUT C.O.D. ORDERS

To save you money, we strongly recommend that you send full remittance with your order. However, if you wish C.O.D. shipment, see page 440 for Money Order and C.O.D. charges. The minimum C.O.D. order is $10.00. An advance deposit of 20% of the total order value is required.

SHIPMENTS OUTSIDE THE CONTINENTAL UNITED STATES

PORTANT! On all merchandise to be
pped outside the United States, allow
ty days for delivery. For faster ship-
nt, request "Air". Be sure to include the
ditional air charges in figuring your
ler. See AIR PARCEL POST SHIPMENTS
page 440 or consult your local air
ent for charges. No C.O.D.

NADA. We deduct 10% from face
ue of remittances in Canadian curren-
Please add 10% to such remittances.
cel Post limits: 25 lbs. and 70 inches
gth plus girth); 42" max. length.
00 for first 2 lbs., 30¢ for each added
Insurance fees, p. 440. No C.O.D. or
Parcel Post. We can ship exp. or frt.

ASKA AND HAWAII. Parcel Post
mited to 70 lbs. and 100 in. (length
s girth). Zone 8 rates. Over 40 lbs.,
d 15¢ per lb. No C.O.D. orders. Insur-
e fees, p. 440. Marine and Risk insur-
e required as follows: Air freight, 10¢
$100; Air Express, 18¢ per $100;
k or ship, 50¢ per $100.

APO'S AND FPO'S. Air and surface shipments are usually limited to 70 pounds and 100 inches (length plus girth). Determine restrictions to your APO or FPO before ordering. No C.O.D. shipments. Remit charges as follows:

NEW YORK APO'S AND FPO'S. Use Zone 5 rates. See chart on page 440. (Over 40 lbs. add 10¢ per lb.)

SAN FRANCISCO APO'S AND FPO'S. Use Zone 8 rates. See chart on Page 440. (Over 40 lbs. add 15¢ per lb.)

U.S. POSSESSIONS. All transportation charges must be included with remittance. No C.O.D. See your local agent for charges. Parcel Post shipments to Canal Zone, Canton Island, Guam, Marianna and Marshall Islands, Puerto Rico (see note below), Samoa, Virgin Islands and Wake Island are limited to 70 lbs. and 100 in. (length plus girth). Charges based on Zone 8 rates. Over 40 lbs., add 15¢ per lb. Puerto Rico imposes excise taxes on delivery of electrical appliances (hi-fi, components, etc.) of at least 15%.

EXPORT ORDERS

The minimum order we can accept for delivery outside the U.S. is $25.00 in U.S. currency. Each export order must be accompanied by cash for the full amount of the order or an irrevocable letter of credit. Prices are net, f.o.b. our plant. Include 20% over merchandise value for documentation, packing and shipping costs. On orders over $500.00 include 10%. Any extra money that is sent will be refunded. Parcel post to APO or FPO addresses are considered domestic mailings—use Zone 5 rates for New York, Zone 8 for San Francisco. For any additional information you may require, write to our Export Department, 100 N. Western Ave., Chicago, Illinois, 60680.

e Pages 440-441 for Additional Ordering Information

IMPORTANT ORDERING INFORMATION

USE YOUR ZIP CODE TO FIND YOUR PARCEL POST ZONE

Use the first 3 digits of your Zip Code number to determine your parcel post zone. Example: If your Zip Code is 58374, use the first 3 numbers (583), and refer to chart below f your Zone which is 5.

Zip Code	Zone	Zip Code	Zone	Zip Code	Zone	Zip Code	Zone	Zip Code	Zone	Zip Code	Zone	Zip Code	Zon
006-009	8	286-289	4	400-406	3	474-478	3	560-574	4	718	5	835-839	7
010-046	5	290-292	5	407-409	4	479	2	575-579	5	719-729	4	840-849	6
047	6	293	4	410	3	480-489	3	580-581	4	730-739	5	850-854	7
048-098	5	294-295	5	411-419	4	490-491	2	582-589	5	740-744	4	855-863	6
100-129	5	296-297	4	420	3	492	3	590-591	6	745	5	864	7
130-132	4	298-299	5	421-422	4	493-495	2	592-593	5	746	4	865-880	6
133-139	5	300-303	4	423-424	3	496-499	3	594-599	6	747-748	5	881	5
140-179	4	304	5	425-426	4	500-504	3	600-605	1	749	4	882-883	6
180-199	5	305-307	4	427-428	3	505	4	606	Local	750-778	5	884-889	5
200-215	4	308-329	5	439	4	506-507	3	607-609	1	779-785	6	890-899	7
216	5	330-334	6	440-443	3	508-519	4	610-619	2	786-787	5	900-933	7
217	4	335-338	5	444-447	4	520	2	620-636	3	788	6	934	8
218-219	5	339-349	6	448-456	3	521-526	3	637-649	4	789-796	5	935-938	7
220-232	4	350-359	4	457	4	527-539	2	650-652	3	797-799	6	939-951	8
233-238	5	360-361	5	458-459	3	540	4	653-675	4	800-812	5	952-953	7
239-274	4	362	4	460-462	2	541-547	3	676-679	5	813-819	6	954-955	8
275-279	5	363-369	5	463-464	1	548	4	680-689	4	820-823	5	956-961	7
280-282	4	370-389	4	465-469	2	549	3	690-699	5	824-825	6	962-969	8
283-285	5	390-396	5	470-472	3	550-558	4	700-715	5	826-828	5	970-994	7
		397	4	473	2	559	3	716-717	4	829-834	6	995-999	8

HOW TO ESTIMATE YOUR PARCEL POST CHARGES

Up to 16 oz., all zones allow 6¢ for first 2 oz., 2¢ for each additional oz. Find the weight of your merchandise in the extreme left-hand column of the chart at right. Pay the amount listed for Parcel Post shipment to your zone. A fraction of a pound is charged as a full lb. For example, if the weight is 4 lbs. and 1 oz. to Zone 4, postage would be for 5 lbs. (90¢). Shipments over 40 lbs. sent by Truck or Express. See following page.

PARCEL POST RATES

WEIGHT 1 lb. & Not Exceeding	Local	1st & 2nd Zone up to 150 mi.	3rd Zone 150 to 300 mi.	4th Zone 300 to 600 mi.	5th Zone 600 to 1000 mi.	6th Zone 1000 to 1400 mi.	7th Zone 1400 to 1800 mi.	8
2	$0.50	$0.60	$0.60	$0.65	$0.70	$0.80	$0.85	$
3	.50	.65	.70	.75	.85	.95	1.05	
4	.55	.70	.75	.85	.95	1.10	1.20	
5	.55	.75	.80	.90	1.05	1.25	1.40	
6	.55	.80	.90	1.00	1.15	1.40	1.55	
7	.60	.90	.95	1.10	1.30	1.50	1.75	
8	.60	.95	1.00	1.15	1.40	1.65	1.90	
9	.65	1.00	1.05	1.25	1.50	1.80	2.05	
10	.65	1.05	1.15	1.35	1.65	1.90	2.25	
11	.65	1.10	1.20	1.40	1.75	2.00	2.40	
12	.70	1.15	1.25	1.50	1.85	2.15	2.55	
13	.70	1.20	1.35	1.55	1.95	2.25	2.70	
14	.75	1.25	1.40	1.65	2.05	2.40	2.85	
15	.75	1.30	1.45	1.75	2.15	2.50	3.00	
16	.75	1.35	1.55	1.80	2.25	2.60	3.15	
17	.80	1.40	1.60	1.90	2.35	2.75	3.30	
18	.80	1.45	1.65	1.95	2.45	2.85	3.45	
19	.85	1.50	1.75	2.05	2.55	2.95	3.60	
20	.85	1.55	1.80	2.10	2.65	3.10	3.75	
21	.85	1.60	1.85	2.15	2.75	3.20	3.90	
22	.90	1.65	1.90	2.25	2.80	3.30	4.05	
23	.90	1.70	1.95	2.30	2.90	3.40	4.20	
24	.95	1.75	2.00	2.35	3.00	3.55	4.35	
25	.95	1.75	2.05	2.45	3.05	3.65	4.50	
26	.95	1.80	2.05	2.50	3.15	3.75	4.65	
27	1.00	1.85	2.10	2.55	3.25	3.90	4.80	
28	1.00	1.90	2.15	2.60	3.35	4.00	4.90	
29	1.05	1.90	2.20	2.70	3.40	4.10	5.05	
30	1.05	1.95	2.25	2.75	3.50	4.20	5.20	
31	1.05	2.00	2.30	2.80	3.60	4.35	5.35	
32	1.10	2.05	2.35	2.90	3.65	4.45	5.50	
33	1.10	2.10	2.40	2.95	3.75	4.55	5.65	
34	1.15	2.10	2.45	3.00	3.85	4.65	5.75	
35	1.15	2.15	2.50	3.05	3.95	4.80	5.90	
36	1.15	2.20	2.55	3.15	4.00	4.90	6.05	
37	1.20	2.25	2.60	3.20	4.10	5.00	6.20	
38	1.20	2.25	2.65	3.25	4.20	5.10	6.35	
39	1.25	2.30	2.70	3.35	4.25	5.25	6.45	
40	1.25	2.35	2.75	3.40	4.35	5.35	6.60	

INSURANCE FEES

We insure all Parcel Post shipments with a private insurance company. In case of loss or damage, adjustment is made easily and quickly. See fees below.

$2.00 to $15.00..20¢ $15.01 to $50.00....30¢
$50.01 to $100.00........................ 40¢
$100.01 to $150.00........................50¢
$150.01 to $200.00........................60¢
Over $200.00...................add 40¢ per $100.00

AIR PARCEL POST

We will ship your order Air Parcel Post upon request. Weight and size limitations, 70 lbs. and 100 inches (length plus girth). Rates in table below.

10¢ per ounce, up to 3 ounces

Wt., Lbs.	Zones					
	1, 2, 3	4	5	6	7	8
1	$0.80	$0.80	$0.80	$0.80	$0.80	$0.90
1-1½	.98	1.02	1.07	1.14	1.18	1.24
1½-2	1.16	1.23	1.34	1.47	1.55	1.64
2-2½	1.40	1.48	1.62	1.79	1.91	2.08
2½-3	1.64	1.73	1.90	2.11	2.27	2.48
3-3½	1.88	1.98	2.18	2.43	2.63	2.88
3½-4	2.12	2.23	2.46	2.75	2.99	3.28
4-4½	2.36	2.48	2.74	3.07	3.35	3.68
4½-5	2.60	2.73	3.02	3.39	3.71	4.08
Add per lb.	48¢	50¢	56¢	64¢	72¢	80¢

C.O.D. ORDERS

To save you money, we strongly recommend that you send a remittance with your order. The Post Office charges both a C.O.D. fee, *plus* a money order fee. Minimum C.O.D. order is $10.00, wit posit of a least 20%. Estimate charges from both tables be

PARCEL POST C.O.D. FEES:

$0.01 to $10.00.......... 60¢
$10.01 to $25.00.......... 70¢
$25.01 to $50.00.......... 80¢
$50.01 to $100.00........ 90¢
$100.01 to $200.00.. ...$1.00

MONEY ORDER FEES:

From $0.01 to $10.00....................
From 10.01 to 50.00....................
From 50.01 to 100.00....................

See Pages 439 and 441 for Additional Inform

IMPORTANT ORDERING INFORMATION

IOTE: On Cash Orders, Be Sure to Include All Transportation harges. A Handling Charge of 50¢ Will Be Applied on Cash rders Under $10.00. (Use Tables on These Two Pages to Calulate Charges.) On Credit Fund Orders, Allied Will Ship All lerchandise Prepaid and Transportation Charges Will Be dded To Your Credit Fund Account.

SHIPMENT OF NON-PARCEL POST ITEMS

(Items with suffix U, W or Z in Allied's Stock No.)

llied will always ship your order the best and lowst-cost way possible. Items weighing up to 40 lbs. ıd otherwise mailable will usually be sent Parcel ost (see page 440). Items which are not mailable ther because of size or weight restrictions or beause of their fragile nature are generally shipped as llows: Items with suffix letter "U" in Stock No. e either oversize for mail handling or particularly agile and are usually shipped Express.

Items with suffix letter "W" or "Z" in Stock No. are heavier items and are usually shipped by truck. Calculate shipping charges from appropriate truck and express tables below. Express charges ordinarily include home delivery to urban areas and in some cases to rural areas. Further information on this is available at your local R.E.A. office. Please see paragraph below concerning home delivery charges on truck shipments.

REA EXPRESS SHIPMENTS

Shpg. Wt., in Lbs.	Chicago	ZONES 1 & 2 Local to 150 mi.	ZONE 3 151 to 300 mi.	ZONE 4 301 to 600 mi.	ZONE 5 601 to 1000 mi.	ZONE 6 1001 to 1400 mi.	ZONE 7 1401 to 1800 mi.	ZONE 8 Over 1800 mi.
-25	6.00	6.85	7.30	8.30	9.75	10.90	12.00	13.10
26-50	6.25	7.75	8.45	9.90	12.10	13.85	15.45	17.15
51-75	6.70	8.60	9.65	11.50	14.40	16.70	18.90	21.25
76-100	7.10	9.45	10.75	13.10	16.65	19.50	22.30	25.10
Over 100 lbs., Add per lb.	7¢	10¢	11¢	13¢	17¢	20¢	22¢	25¢

TRUCK SHIPMENTS

Shpg. Wt. in Lbs.	Local to 150 mi.	151 to 300 mi.	301 to 600 mi.	601 to 1000 mi.	1001 to 1400 mi.	1401 to 1800 mi.	Over 1800 mi.
Under 100 lbs.	6.07	6.51	7.34	8.14	8.96	9.33	11.18
Over 100 lbs. Add per lb.	3¢	4¢	5¢	6¢	6¢	9¢	11¢

HOME DELIVERY CHARGES ON TRUCK SHIPMENTS

most areas of the country, a residential delivery arge is added to the normal truck rates when delivery is to be made directly to a residence. This charge is usually between $5.00 and $5.50.

AIR FREIGHT AND AIR PARCEL POST SHIPMENTS

"Rush" orders will be shipped via air freight, Air Express, or Air Parcel Post upon your request. Contact your local express or postal agent for information concerning shipping costs. Air Freight and Air Parcel Post charges should be included with remittance on cash orders.

SHIPMENTS DIRECT FROM FACTORY

e letter "F" at the end of our Stock Nos. indicates merchandise at is shipped directly from the factory collect by Express or truck ly. Freight and Express charges are based upon the distance from tory to point of destination.

e Pages 439 and 440 for Additional Information

ALLIED GUARANTEES YOUR SATISFACTION OR YOUR MONEY BACK

If for any reason, you are not satisfied with your purchase, return it to us within 30 days in the original factory carton and we will exchange it or return your money (less transportation charges). Merchandise returned must not have been abused or altered. This policy does not apply to kits. Kit guarantees below.

SERVICE AND REPLACEMENT GUARANTEE:

All merchandise is guaranteed to be free of defects in material and workmanship for the period of time specified in the listing of the product. Where no time is specified, the guarantee is for 90 days.

Wherever so indicated in our listing of the product we will replace it. Wherever our listing does not specify, we will either replace it or repair it at our option. Item must be returned prepaid for our inspection.

KNIGHT-KIT GUARANTEE: All parts in kits are guaranteed to be free from defects in material or workmanship for 90 days. During this period we will replace any defective part returned to us. Within the 90 day period, your completely wired kit may be returned to us prepaid for repair and adjustment at the service and handling charge published in the warranty and service section of your kit manual.

OTHER KITS: Kits of manufacturer's other than Allied carry the same guarantee as above, except that Allied does not repair or rewire them. They must be returned to the manufacturer, who will determine the charges where applicable.

IF IT IS NECESSARY TO WRITE TO US

We return your order papers with an invoice that summarizes prices and transportation charges. If you write to us about your order, please include all order papers and any correspondence that we have returned to you. If you don't have the order papers, provide us with the Stock Numbers, and description of the merchandise, the name and address that appeared on the original order, and the date of the order.

LOCAL SERVICE FACILITIES

In many instances, our suppliers maintain service fac
around the country. Be sure to read your instruction ma
If it is necessary to return merchandise for service, wr
advance—we will be able to advise you if service is avai
in your locality. This especially applies to High-Fidelity
ponents, Tape Recorders, Radios, Record Turntables
Television Sets.

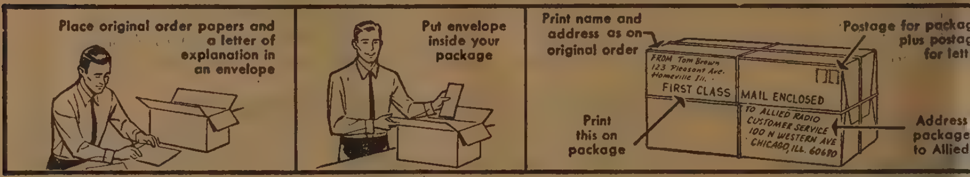
IF YOU FIND IT NECESSARY TO RETURN MERCHANDISE

Returned merchandise should be shipped to Allied prepaid in its original factory carton, with all papers, correspondence, instructions, etc. included. Also return all accessories that came with the merchandise (Test Equipment Probes, Cases, Books, Instruction Manuals). This will assure fastest adjustments with no delays in handling.

Parcel Post. Place instructions, all papers and correspondence in an envelope inside package. Mark "First Class Mail Enclosed" and add extra postage for letter. Be sure to insure the package for full value.

Express and Truck. Place all papers in a stamped, se
envelope inside the package. Date envelope and draw
across the stamp with ink. Your name and address shou
on envelope and package. Insure for full value.

SHIP PREPAID TO: Allied Radio Corporation, Customer Service Dept.
100 N. Western Ave., Chicago, Illinois 60680



IF YOUR ORDER IS RECEIVED DAMAGED

If merchandise is received damaged, contact our Customer Service Department by letter for instructions. In the case of express or truck shipments, if there is apparent or obvious damage, be sure this is noted on the receipt when you sign for delivery. If you find concealed damage upon opening your shipment, retain all packing materials (both internal and external)
contact carrier to obtain an inspection. Send all
papers, delivery receipt and inspection reports t
and wait for our instructions on how to return g
All damaged goods must be returned via the carrier
made the delivery.

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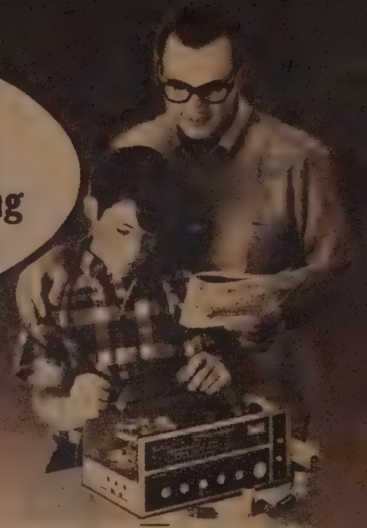

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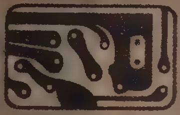

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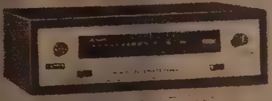

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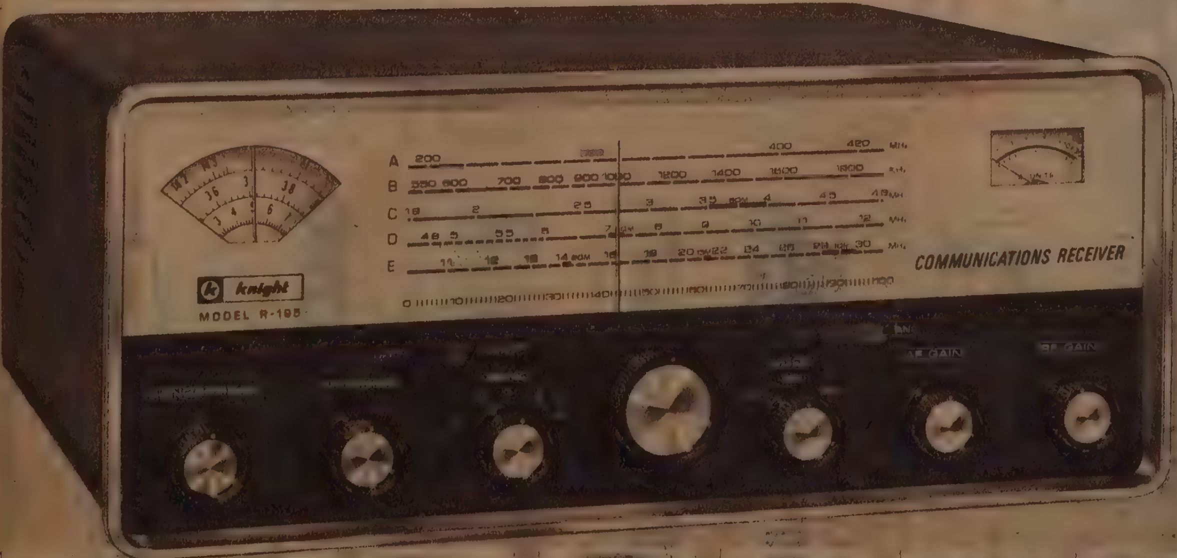

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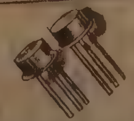
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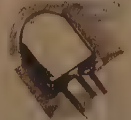
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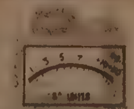
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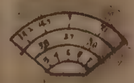
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97⁵⁰

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95⁵⁰

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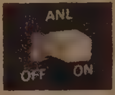
1st Shortwave	1.8 to 4.8 MHz
2nd Shortwave	4.8 to 12 MHz
3rd Shortwave	12 to 30 MHz



Switchable ANL for reduction of man-made noise

Illuminated "S" meter for measuring signal strength and for more accurate tuning

Switchable AVC to prevent fading or blasting

Lowest-cost Star Roamer Kit Outfit for world-wide radio listening

41.95 $5 monthly *see page 438*

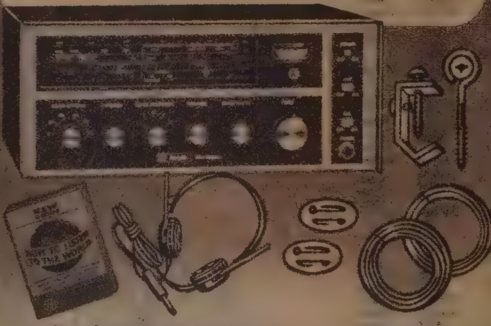
Ever-popular shortwave receiver kit outfit features easy assembly . . offers complete coverage and wide-range radio reception

If you would like the wonderful experience of assembling a Knight-Kit and getting a good receiver too, you'll want this outfit. After a few enjoyable hours of assembly you'll have a complete, sensitive receiving station for international and domestic listening. It's the perfect outfit for getting started in long-distance radio listening. Discover the thrill of armchair traveling with the feature-packed Star Roamer. Valuable accessories assure outstanding CW, SW reception plus regular AM stations. Outfit includes: Star Roamer 5-Band Shortwave Receiver Kit; Antenna Kit for outdoor and attic mounting, with 50 ft. of wire, 25-ft. lead-in, standoff, clamp, insulators; Dual Headset with cord, plug. Metal cabinet, wire, solder, detailed instructions. 5½x12¼x8". 110-130 V, 60 Hz AC. Receiver from Japan.

22 A 0011 L3X. Shpg. wt., 14 lbs....................41.95

Star Roamer Kit Outfit with 84-page "How to Listen to the World" book

42.95 $5 monthly *see page 438*



Star Roamer Kit Outfit features Long-Range Antenna Kit, Dual Headset for private listening, 84-page Guide to World Listening

Quality 4-piece outfit offers everything needed for exciting shortwave listening. Big 84-page guidebook provides frequency listings of shortwave broadcast stations all over the world, including type of broadcast (music, news, commentary, etc.), time schedules, plus useful and interesting information about the "hows and whys" of shortwave broadcast stations. Antenna kit includes everything necessary for outstanding reception of all available stations. Outfit includes: Star Roamer Receiver Kit; Antenna Kit with 50-ft. wire, 25-ft. lead-in, standoff, clamp, insulators; Dual Headset with cord and phone plug; 84-page Book, "How to Listen to the World." Dual headset allows private listening—have all the volume you want without disturbing others. With all parts and easy-to-follow instructions. 110-130 VAC. Receiver from Japan.

22 A 0268 L4X. Shpg. wt., 15 lbs....................42.95

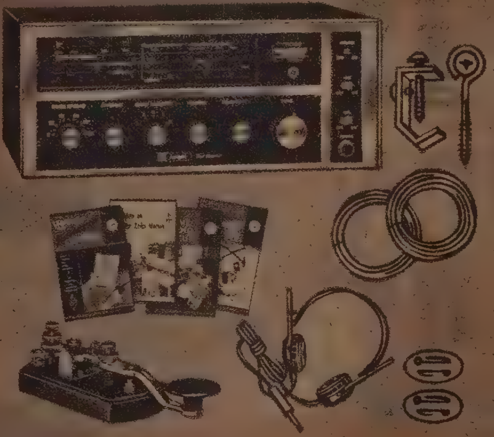
Start learning Amateur Radio with this Star Roamer Kit Outfit

Fascinating introduction to Ham Radio . . Star Roamer Outfit with Code Key, ARRL Book Set

43.95 $5 monthly *see page 438*

You learn by listening to the Hams themselves. Star Roamer covers 160 through 10-meter Ham bands. Learn Morse Code by listening "on the air"—then practice it, using the code key plugged into the rear-panel jack on the receiver. Outfit includes: Star Roamer Receiver Kit; Antenna Kit; Dual Headset; Code Practice Key; 4-Book ARRL Set, "Gateway to Amateur Radio," including How to Become a Radio Amateur, Learning the Radio-Telegraph Code, Operating an Amateur Radio Station, Radio Amateur's License Manual. Books are written in non-technical language. Star Roamer kit includes all parts, detailed easy-to-follow instructions. For 110-130 VAC. Receiver from Japan.

22 A 0269 L5X. Shpg. wt., 16 lbs....................43.95

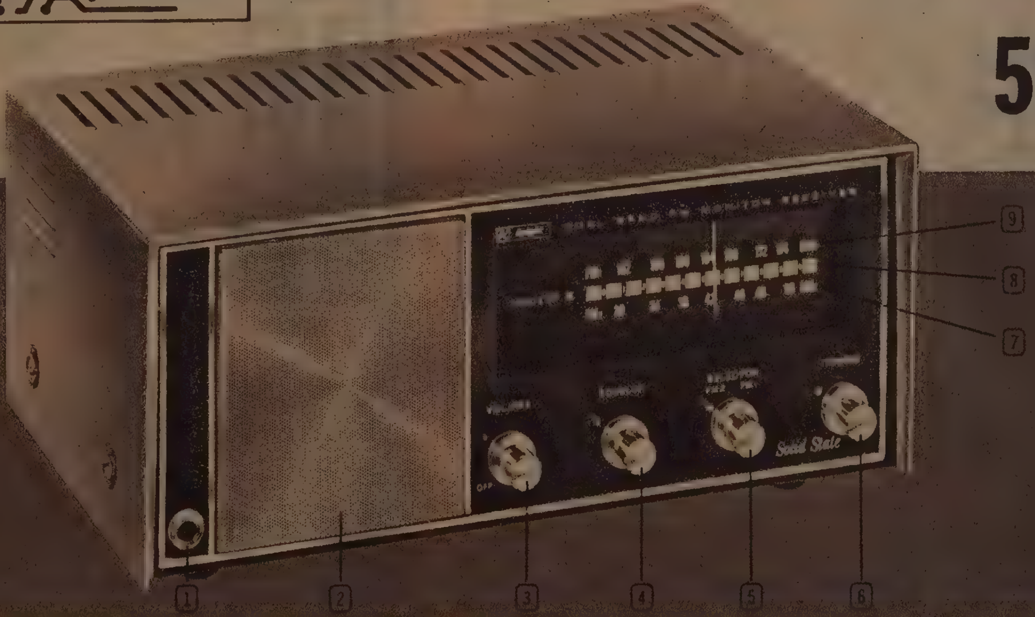


Knight-Kits are a product of Allied Radio

knight-kit
VHF
RECEIVERS

Dual band VHF FM Monitor Receiver Kit featuring *Modular Concept assembled printed circuit boards

59⁹⁵ $5 monthly
see page 438



*MODULAR CONCEPT

Knight-Kit's new concept makes kit assembly faster, easier, and more enjoyable. Most parts are mounted and soldered on PC boards. All you do is solder interconnections. Critical circuits are aligned at the factory.

1 **AUDIO JACK:** Takes headphones for private monitoring or external speaker.

2 **MONITOR SPEAKER:** Built-in 4" speaker fed by powerful push-pull audio output.

3 **ON/OFF VOLUME:** Varies loudness of signal being received. Turns AC power on and off.

4 **SQUELCH:** Cuts off speaker during no-signal periods, restores it when signal is present.

5 **BAND SELECTOR:** Instantly selects lower VHF or upper VHF band.

6 **MAIN TUNING:** Tunes the receiver to the desired frequency as indicated on the dial.

7 **BAND 2:** Receives signals in the range of 30 MHz to 50 MHz.

8 **LOGGING SCALE:** Numbered 0-100, aids in retuning stations of unknown frequencies.

9 **BAND 1:** Receives signals in the range of 152 MHz to 174 MHz.

Knight-Kit's solid-state circuit has tuned RF stage plus four IF stages to pull in all police/emergency calls on 30-50 MHz and 152-174 MHz

Knight-Kit Monitor III. Tune in on the "action" with this receiver kit that lets you monitor land transportation radio services in your area. Hear police calls, fire alarms, civil defense, Weather Bureau, taxis, mobile radio-telephones, public safety and domestic public services. Covers *both* the 30-50 MHz and 152-174 MHz bands. Solid-state design for dependable, instant operation. Sensitive FM circuit gives you static-free reception. Powerful push-pull audio output. 4 preassembled, aligned IF's, tuned RF and mixer for greater sensitivity and selectivity. Automatic Volume Control (AVC) prevents overload by strong signals and boosts weak signals for best possible reception. Regulated power supply. Adjustable squelch keeps receiver silent unless a signal is being received . . eliminates static between messages. Adjustable to varying signal strengths. Any headphones with 8-ohm impedance may be used by simply plugging into the jack marked "Phones". An external 8-ohm speaker using a standard ¼" phone plug may also be connected to this jack. Insertion of a phone plug into jack automatically silences built-in 4" speaker. Easy-to-read illuminated dial is equipped with a logging scale numbered from 0 to 100, a valuable aid when you want to return to a specific point on the dial after tuning through the band. Antenna terminals for connecting your antenna for best possible long-range reception. Gray metal case. 5⁵⁄₁₆x11⅞x7¾". With solder, pre-cut wire, illustrated instruction manual. For 117 VAC. From Japan.

22 A 3412 X. Shpg. wt., 11 lbs. 59.95

17 A 6226. 8-ohm Dual Headset. With plug and cord. Shpg. wt., 1 lb. 5.95

SPECIFICATIONS

Tuning Range: 30-50 MHz and 152-174 MHz. *Sensitivity:* Better than 4 μV for 20 dB S/N. *IF:* 10.7 MHz. *Power Supply:* Full wave, transformer operated; zener diode regulation. *Active Circuit Elements:* 20 transistors, plus 10 diodes. *Audio Output:* 1 watt into 4-inch speaker. *Antenna Output:* 50-75 ohms impedance. *Headphone Output:* 8 ohms impedance, standard headphone jack provided. *Power Consumption:* 10 watts at 110-120 volts, 50-60 Hz AC.

30-50 MHz FM BAND

Police, fire, civil defense, other emergency services, utilities, radio-telephone service, radio dispatched repair vehicles, paging service.

152-174 MHz FM BAND

Police, fire, civil defense, other emergency services, U.S. Weather Bureau forecasts, railroads, taxicabs, forestry and conservation, private mobile telephone.

NOTE: *Frequencies used differ in various parts of the country. Ask local authorities for the specific frequencies used by the various services in your own region.*

Save $5.90

69^{50}

Get increased range with this complete Monitor Receiver Outfit

Separately, $75.40. Outfit includes: Knight-Kit Monitor III Dual-Band VHF-FM Monitor Receiver, Allied ¼-Wave Ground Plane Antenna, and 50' Coil RG-58/U Foam Coax Cable. Pick up more signals on your receiver with this low-cost outfit. Antenna has mounting clamp for up to 1⅝" dia. masts. Cable with PL-259 connectors.

22 A 0133 L3X. Wt., 16 lbs. . . 69.50

17 A 6714 X. Allied Antenna Alone. Shpg. wt., 3 lbs. 9.95

17 A 6883. 50' Coil RG-58/U Cable Alone. Shpg. wt., 2 lbs. 5.50

Save $10.90

74^{50}

Deluxe Monitor Receiver Outfit boosts performance

Separately, $85.40. Includes: Monitor III Receiver, Antenna Specialists MON-8 Antenna, 50' Coil RG-58/U Foam Coax Cable. Get top performance at a low system price. Double-loading-coil ground plane antenna has omnidirectional pattern. For masts up to 1½" dia. SO-239 connection for PL-259 connector. Cable with PL-259 conn.

22 A 0134 L3X. Wt., 19 lbs. . . 74.50

17 A 6716 X. MON-8 Antenna Alone. Shpg. wt., 6 lbs. 19.95

17 A 6883. 50' Coil RG-58/U Cable Alone. Shpg. wt., 2 lbs. 5.50

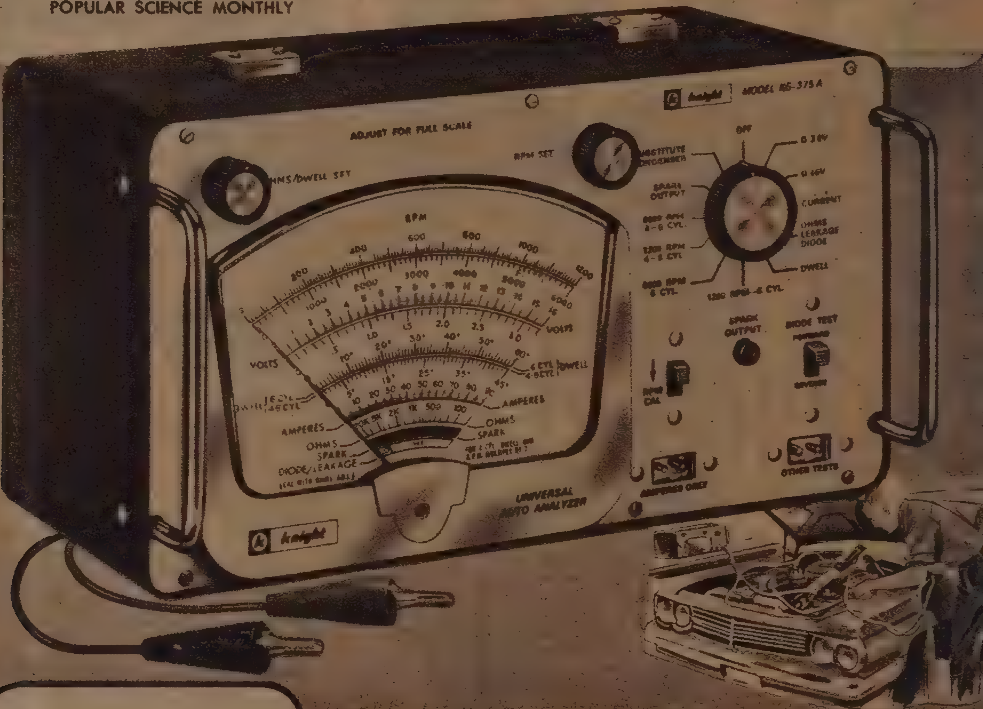
knight-kit
AUTOMOTIVE

Portable Auto Analyzer Kit . . Saves on car tuneups and troubleshooting

". . . The finished analyzer is as accurate as any ready-made unit . . . top-quality components."
POPULAR SCIENCE MONTHLY

"Enables anyone to make his own tuneups . . . do his own troubleshooting with . . . ease . . ."
SCIENCE AND MECHANICS

49

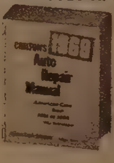

knight MODEL KG-375A
ADJUST FOR FULL SCALE
OHMS/DWELL SET
RPM SET
RPM
VOLTS
AMPERES
OHMS
SPARK
DIODE/LEAKAGE
OFF
CURRENT
DWELL
SPARK OUTPUT
DIODE TEST
RPM CAL
AMPERES ONLY
OTHER TESTS
UNIVERSAL AUTO ANALYZER
knight

- ✓ Battery-powered for in-car road tests
- ✓ Silicon solid-state tachometer circuit
- ✓ Printed circuit board for easy assembly
- ✓ Front-Panel Roll Bars
- ✓ Detailed tuneup and troubleshooting chart
- ✓ Single function switch
- ✓ Easy-to-read D'Arsonval 7-inch meter reads engine rpm, voltage amperes, resistance dwell angle, spark output and leakage

Knight-Kit KG-375A. Solid-state auto analyzer kit can save you hundreds o dollars during the life of your car, and help you boost its performance too Gives you many deluxe extras—outperforms many factory assembled analyzers costing more. Helps you do your own tuneups and many repairs and adjustments. Lets you test significant factors of your car's electrical and ignitio systems prior to determining what repair work needs to be done.

Accurately checks voltage and current regulators, generators, alternato diodes. Checks distributor wear, condition of point surfaces, variation o dwell angle. Determines coil resistance, locates poor or open electrical groun circuits, much more. Self-contained and portable for actual road performanc tests. Single function switch for operating ease. Big 7″ meter has sensitiv D'Arsonval movement; scales for 0-1200-6000 engine rpm; 0-3.2-16 volts; 0-9 amps; 0-20,000 ohms; 0-45° -60° -90° dwell angle; spark output and leakage Case, 6½x12x5½″, with roll bars, carrying handle, soft rubber feet.

With comprehensive tuneup, troubleshooting manual; 4 "C" batteries; 90- amp shunt; solder; assembly instructions. For 6 or 12-volt systems, 4, 6 or 8 cylinder engines, positive or negative ground. From Japan.
22 A 3323 X. Shpg. wt., 11 lbs. **49.95**


CHILTON'S 1969 Auto Repair Manual

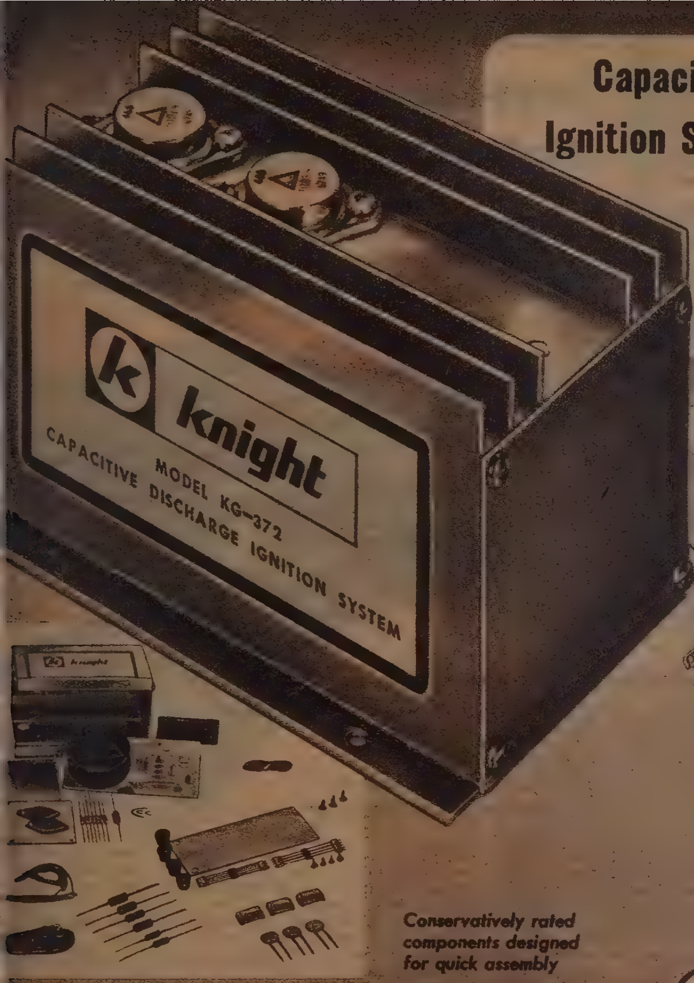
Chilton's 1969 Auto Repair Manual

Complete, authoritative, highly understandable manual covers all U.S. cars, 1961 to 1969. Detailed step-by-step instructions for every repair and adjustment. Troubleshooting section. Illustrated. Over 1400 pages. 8¾x11¾″. Hard cover.
23 A 7121 E. Shpg. wt., 7 lbs. **9.95**

Everything we sell is available on Credit Terms—see page 438

Capacitive-discharge Ignition System Kit boosts engine power

28^{95}



Conservatively rated components designed for quick assembly

Helps give faster starts even in subzero weather

3 to 10 times longer plug and point life

Increases mileage up to 20% . . save up to 4 gallons each time you fill up

ight-Kit KG-372. Solid-state capacitive-discharge ignition system kit offers ramatic performance improvement for your car, or boat, at an exciting low ice. Also cuts operating costs. Provides many times the energy of ordinary nition systems to give you more complete combustion, increased accelera- on, and improved engine performance, plus 10% to 20% increase in gas ileage. Drive many thousands more miles between tuneups.

ncreased spark magnitude—from 3 to 4 times normal—assures improved nition. Fast spark rise-time helps prevent fouling and electrode erosion, sulting in 3 to 10 times longer spark-plug life. Complete combustion reduces rmation of residuals and other contaminants which shorten engine life. fter easy assembly, installs in less than 10 minutes into standard ignition stem with no rewiring, removal, or addition of parts. Leaves original coil tact—disconnects in one minute for performance comparisons.

put current: 1-5 amps, depending on rpm; 400-volt discharge pulse. Trig- ered by ignition points or any suitable source. Unaffected by temperature tremes or operating conditions. 3x5½x3⅜". With all parts, solder, instruc- ons. For 12-volt systems only, positive or negative ground.

A 9575 X. Shpg. wt., 2½ lbs. 28.95

SPECIFICATIONS

put Source: 12-volt positive or nega- ve ground battery, generator or ternator. *Input Current:* 1-5 amps, pending on rpm. *Output:* 400-volt scharge pulse. *Triggering:* Points or her source. *Maximum Point Series Resistance:* About 25 ohms. *Minimum Point Shunt Resistance:* About 200 ohms. *Open Circuit Secondary Voltage:* Cranking 8-volt input, 35 kV; 500-rpm 12-volt input, 50 kV; 7500-rpm 14-volt input, 40 kV.

- ✓ Installs in cars or boats
- ✓ Connects to your engine in just 10 minutes
- ✓ Increased spark assures fast, positive ignition
- ✓ Gives you fast, sure starts in any kind of weather
- ✓ Provides more complete combustion and better gas mileage for improved performance and economy
- ✓ For positive or negative 12-volt ignition systems
- ✓ Uses silicon-controlled-rectifier switching
- ✓ Reduces spark-plug fouling

knight-kit
AUTOMOTIVE

High-intensity Timing Light Kit for focused super-bright flashes

19^{95}
$5 monthly*

Powered by built-in DC supply, not by ignition coil, for flashes that make timing marks visible even in daylight

COMPARES WITH LIGHTS COSTING MUCH MORE

- ✓ Helps you get maximum mileage
- ✓ Helps you set ignition timing
- ✓ Checks double breaker-arms
- ✓ Checks automatic spark-advance
- ✓ Checks distributor-cam wear
- ✓ Reliable solid-state circuit
- ✓ Pistol-grip trigger switch
- ✓ Rugged high-impact housing
- ✓ Up to 1250 flashes-per-minute (2500 rpm with 4-cycle engine)

Knight-Kit KG-371. Outstanding timing-light kit offers design features stressing fine performance, ease of handling, and durability. It's everything you would want in a timing light . . easy to build, equals factory-assembled lights, and outperforms many costing much more. Lets you tune-up auto engines and repair them with efficiency and accuracy. High-intensity flash "stops" timing marks on engine flywheel or crankshaft vibration dampener. You accurately check timing by lining-up marks with pointer. Helps you get maximum fuel economy and power by making sure plugs are firing at proper intervals in compression cycle. Checks ignition timing, synchronization of double breaker-arms, automatic spark-advance, and distributor-cam wear. Built-in solid-state DC power supply and high-intensity 600-volt flashtube generate super-bright flashes, sharply
focused by a special light-concentrating lens. Gives muc
brighter flash than that obtained from timing lights ope
ating off ignition coil. Flashes can be clearly seen even i
brightly-lighted work areas. Delivers up to 1250 flashe
per-minute (2500 rpm with 4-cycle engine). High-impac
housing with comfortable form-fitted trigger switch. I
sulated adapter-clip attaches high-voltage cable betwee
spark-plug and its wire. DC cables attach directly to ca
battery. Cables are 5½-feet long for easy under-hood tes
ing. 6⅞x8¾x2". With insulated copper hippo-clips, a
cables, spark-plug adapter. Easy-to-follow instruction
comprehensive, simplified operating procedures. For
or 12-volt systems, positive or negative ground. From Japa
Shpg. wt., 2 lbs.
22 A 3312 X. 19.9

Save $5.00

A low-cost basic Automotive Kit Outfit

34^{90}

$5 monthly*

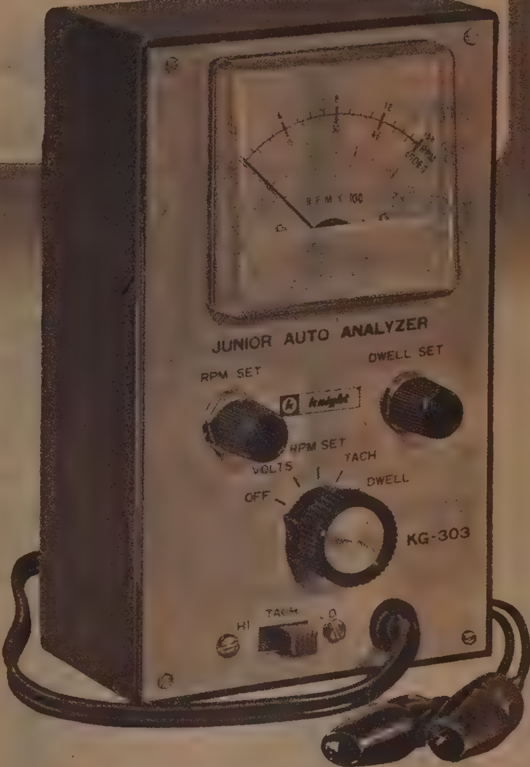
Save on Timing Light and Analyzer Kit Outfit for auto tune-up and repair

Separately, $39.90. Basic automotive kit outfit hel
you get your car in top shape and keep it that way. An
you save on our special low package price, too. Consis
of Knight-Kit KG-371 solid-state high-intensity Timi
Light kit and Knight-Kit KG-303 solid-state Junior Au
Analyzer kit. Both of these fine instruments are vital
proper engine tune-up, troubleshooting, and repair. Au
analyzer has scales for engine rpm, dwell angle, a
voltage. Has easy-to-read 2½" meter with D'Arsonv
movement. Both kits are complete with all parts, solde
instructions. From Japan.
22 A 0304 L2X. Shpg. wt., 6 lbs. . . . . 34.

All-in-one battery-powered Junior Auto Analyzer Kit with simplified controls for easy and fast tests

19^{95} $5 monthly*

*see page 438



- For easier tune-ups and servicing
- Handles 4, 6 and 8-cylinder engines
- Simplified control-panel for fast tests
- Trouble-free all solid-state circuit

night-Kit KG-303. Portable solid-state auto analyzer kit esigned for fast, easy tune-ups and simplified troubleiooting. Gives you performance never expected at iis low price. Full-size 2½" meter has four rpm ranges om 0-6000 rpm; two dwell angle ranges from 0-60°; us 0-16 volt voltmeter range. Convenient compact ze and self-contained battery power let you take it ith you anywhere for road testing.

ay be used on 4, 6, and 8-cylinder engines with either or 12-volt, positive or negative ground ignition. achometer scales read engine rpm—help you set idling eed and automatic transmission shift points. Dwell eter tests points, distributor, and spark-advance. oltmeter measures battery and voltage to any elecical component in your car; also tests fuses.

nalyzer can also be used as a continuity tester to eck whether or not a complete circuit exists. Size, 2x3¾x2½". With all parts, detailed instructions. For or 12 volts, positive or negative ground. Japan.

A 3327 X. Shpg. wt., 3 lbs. 19.95

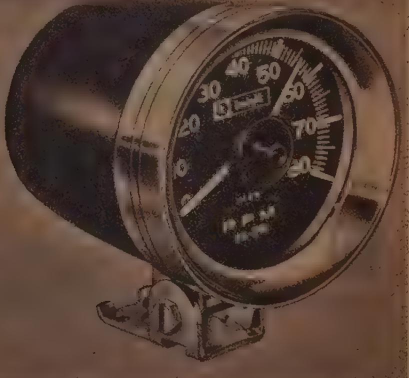
SPECIFICATIONS

oltmeter Range: 0-16 volts. *Accuracy:* ±6% of full ale. *Tachometer Ranges:* 0-1200, 1600, 4500, 6000 m. *Accuracy:* ±6% of full scale. *Dwell Meter Ranges:* 45°, 0-60°. *Accuracy:* ±6% of full scale. *Controls:* unction Switch; Tachometer HI-LO Switch; RPM t Control; Dwell Set Control; Meter Adjustment ontrol. *Power Source:* self-contained 9-volt battery.

luminated auto-marine Tachometer Kit mounts in any position . . all-electronic operation

Stable electronic circuit compensates for normal voltage and temperature changes

17^{95}



ight-Kit KG-340. Deluxe high-sensitivity engine speed indicar works with any 4, 6 or 8-cylinder, 12-volt system, positive negative ground. You save money by assembling it yourself outperforms many tachometers costing much more. Packed th extras not expected at this low price. Range, 0-8000 rpm. curacy, ±2%. Deflection Angle, 240°. Shock and vibrationsistant. Two leads connect to engine key or light switch for al illumination. Big 3¼" dial with rotatable bezel is adjustle for best visibility. Black with chrome bezel. Supplied with cables and full instructions.

A 3330 X. Shpg. wt., 2 lbs. 17.95

knight-kit
AUTOMOTIVE

Keep your car in top tune all year 'round

Get better performance and better mileage with Tuneup and Repair Outfit

Save $8.17

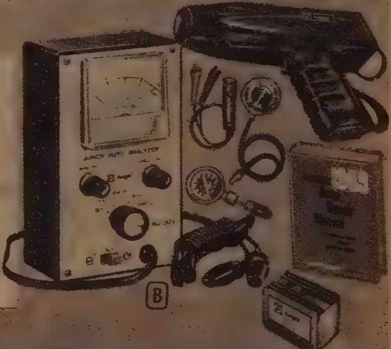
49^{50}

$5 monthly*

A Basic Tuneup and Repair Kit Outfit

Separately $57.67. Big savings on combination outf
Great for part-time mechanics and hobbyists. Consis
of: Knight-Kit KG-303 Junior Auto Analyzer Ki
Knight-Kit KG-371 Timing Light Kit; Chilton's 19
Auto Repair Manual; Assembled Compression Teste
Vacuum and Fuel Pump Tester, Remote Starte
Portable solid-state auto analyzer kit designed for fas
easy tuneups and simplified trouble-shooting. Ch
ton's 1969 Auto Repair Manual covers all U.S. ca
1961-1969. Has detailed step-by-step instructions f
every repair and adjustment. Vacuum and fuel pum
tester checks for proper idle adjustment, leaky valve
Reads up to 30" vacuum, 7 lbs. pressure. Remo
starter permits easy one-man testing.

22 A 0081 L3X. Shpg. wt., 14 lbs. . . . . .49.



Save $11.67

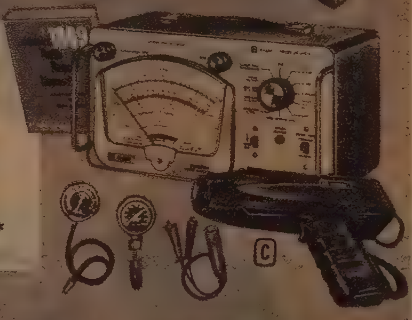
75^{50}

$5 monthly*

B Repair Outfit with Ignition System Kit

Separately $87.17. This outfit includes everythi
needed for fast, easy, repairs and tuneups, pl
ignition system kit for dramatically improved engi
performance. Consists of: Knight-Kit KG-303 Juni
Auto Analyzer Kit; Knight-Kit KG-371 Timing Lig
Kit; Knight-Kit KG-372 Capacitive-Discharge Ign
tion System Kit; Chilton's 1969 Auto Repair Manu
Assembled Compression Tester, Vacuum and Fu
Pump Tester, Remote Starter. Auto analyzer a
timing light kits permit complete check of electric
system. Testers check gas lines, valves, pisto
cylinder head gasket. Capacitive-discharge igniti
system offers up to 20% increased gas mileage, 3
10 times longer spark plug life.

22 A 0080 L4X. Shpg. wt., 16½ lbs. . . . . .75.



Save $12.17

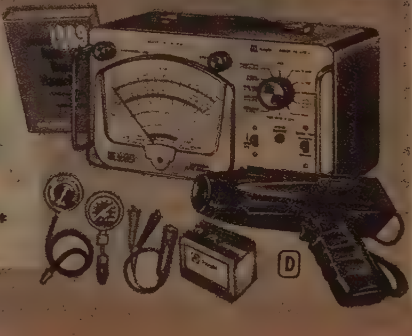
75^{50}

$5 monthly*

C Outfit for extensive tests and repairs

Separately $87.67. Excellent outfit for serious hobb
ists, technicians. Offers more sophisticated troubl
shooting, extensive tests and analyses. Include
Knight-Kit KG-375A Deluxe Auto Analyzer Ki
Knight-Kit KG-371 Timing Light Kit; Chilton
1969 Auto Repair Manual; Assembled Compressi
Tester, Vacuum and Fuel Pump Tester, Remo
Starter. Compression tester locates trouble in valve
piston rings, cylinder head gasket. Vacuum and fu
pump tester checks for proper idle adjustment, lea
valves, gas line leakage. Reads up to 30" vacuum,
lbs. pressure. Remote starter permits under-the-ho
starting for easy one-man testing. Knight-Kits co
plete with all parts, solder, easy-to-follow instruction
other units assembled.

22 A 0659 L6X. Shpg. wt., 22 lbs. . . . . .75.



Save $17.22

99^{95}

$5 monthly*

D Our finest! 7-piece kit outfit

Separately $117.17. Our finest automotive kit outfit
tuneup and repair instruments plus capacitive-di
charge ignition system kit for top operating pe
formance. Includes: Knight-Kit KG-375A Au
Analyzer Kit; Knight-Kit KG-371 Auto Timing Lig
Kit; Knight-Kit KG-372 Capacitive-Discharge Ig
tion System Kit; Chilton's 1969 Auto Repair Manu
Assembled Compression Tester, Vacuum and Fu
Pump Tester, Remote Starter. Auto analyzer a
timing light kits permit complete electrical chec
and adjustments. Testers check gas lines, valve
pistous, cylinder head gasket. Capacitive-dischar
ignition system offers up to 20% increased g
mileage, 3 to 10 times longer spark plug life, reduc
engine maintenance.

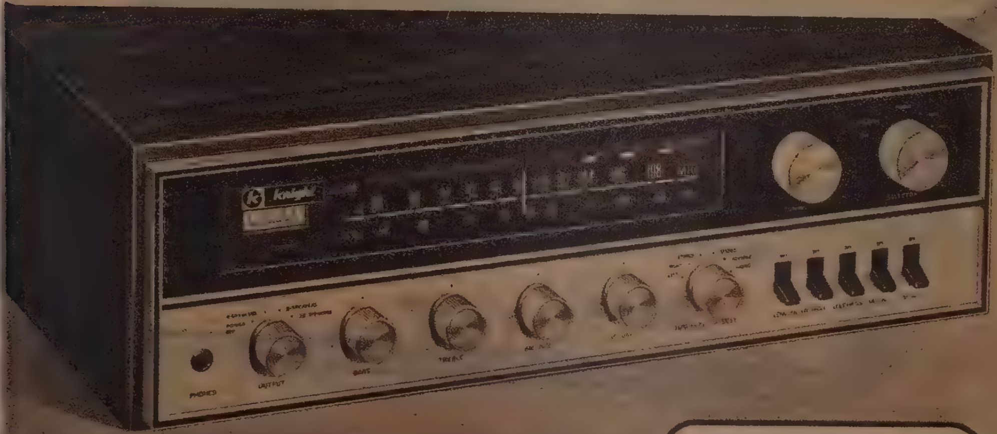
22 A 0491 L7X. Shpg. wt., 26 lbs. . . . . .99.

**Full Credit details on page 438 . . Buy with no money dow*

Knight-Kit® 100-watt Stereo FM-AM Receiver features silicon-transistor circuit for finest hi-fi and new Modular Concept* design for easier kit assembly

Field-effect-transistor in front-end for excellent sensitivity and image rejection . . . integrated circuits and complementary symmetry circuit for amazingly realistic sound . . . power enough to drive two pairs of stereo speakers

179^{95} With Wood Case



ıodel KG-988. Latest in the Knight-Kit line of fine stereo components.
eatures handsome styling, ultra-reliable silicon solid-state circuit, and a
ost of other deluxe features that assure magnificent stereo. Field-effect-
ansistor front-end for high sensitivity and image rejection. Integrated
rcuit in the preamplifier for minimum distortion. Complementary sym-
ıetry circuit (no audio transformers) for full power and response over the
ıtire audio range. Stereo amplifier delivers powerful 100-watt output.

etween-station muting switch lets you tune a desired station from a back-
ound of silence rather than noise. Wide illuminated dial, flywheel tuning
ıd signal-strength meter for effortless station selection. FM stereo, FM
ıono, and AM indicator lights. AFC switch locks in FM signals to prevent
ift. Loudness switch for full response even at low power levels. Separate
ass and treble, balance, volume controls. Scratch and rumble filters. Tape
ıonitor switch for use with three-head tape equipment. Front-panel stereo
adphone jack.

utputs for two pairs of speakers—you can connect remote speaker systems
another room. Switch selects one or both sets of speakers. Built-in AM
ıtenna permits pickup of strong local signals; has terminals for external
ıtenna. Inputs for magnetic or ceramic phono, tape monitor, auxiliary.
alnut veneer wood case. 5¾x17¾x14". For 110-120 volts, 50-60 Hz AC.
ith solder, wire, step-by-step instructions. From Japan.
A 3711 X. Shpg. wt., 24 lbs. **179.95**

SPECIFICATIONS

APLIFIER. *Output at 4 Ohms:* 100 watts ±1 dB; 80 watts IHF; 50 watts rms.
esponse: ±1 dB, 20-30,000 Hz. *Harmonic Distortion:* 1%. *Hum and Noise:*
agnetic Phono, −56 dB; Auxiliary, −70 dB. *Inputs:* Magnetic phono,
ramic phono, tape monitor, auxiliary. *Channel Separation:* Magnetic
ıono, 45 dB; Auxiliary, 50 dB. *Output:* 4 and 8 ohms, headphones, speak-
s (two pairs), recorder. **TUNER CIRCUIT. FM Section.** *Sensitivity:* 2 μV.
paration: over 30 dB. *Signal-to-Noise Ratio:* 45 dB. *Image Rejection:* 90 dB.
ntenna: Includes FM dipole, 300 ohms, balanced. **AM Section.** *Image*
jection: 70 dB. *Antenna:* Built-in ferrite rod; terminals for external antenna.
ENERAL. *Controls:* Volume, Power On/Off, Bass, Treble, Balance, Selector
M, FM Auto, Phono, Tape, Aux.), Speaker Selection (Main, Remote,
ain and Remote, Off), Channel Selector/Tape Monitor, Loudness, Muting,
FC, High and Low Filters.

***MODULAR CONCEPT**
Critical Circuits are assembled and tested READY-TO-USE

Knight-Kit's new concept gives you FOUR ADVANTAGES:

Simplified Assembly. Most parts are mounted, and soldered, on PC boards. Boards mount quickly and easily on chassis. All you do is solder interconnections.

Better Performance and Dependability. Critical PC board circuits are wired and aligned at the factory.

Faster Assembly. Pre-mounting of most parts eliminates tedious mechanical work. Greatly reduces assembly time.

Satisfaction and Enjoyment. You have the satisfaction of assembling the kit yourself, plus the dependability of a factory-assembled model.

knight-kit
STEREO HI-FI

Stereo Amplifier Kit with 60 watts power and all silicon transistors . . at a remarkable low price

Even at this low price you get flat response from 18-30,000 Hz for full enjoyment of your records . . you save by building it yourself . . makes a fine beginning for a low-cost stereo hi-fi system

69^{95} less case **$5 monthly** *see page 438*

PHONO TUNER AUX
VOLUME
BALANCE
TREBLE
BASS
knight
MONO
STEREO
SOLID STATE STEREO AM/FM TUNER

- ✓ No audio transformers, you get full response and power bandwidth
- ✓ Uses silicon transistors exclusively for cleanest possible hi-fi sound
- ✓ Two printed circuit boards for easier and quicker assembly
- ✓ Handy front-panel stereo headphone jack, plus speaker muting switch
- ✓ Separate on-off switch . . volume control setting need not be disturbed
- ✓ Two AC convenience outlets on back for plugging in tuner or record changer

Knight-Kit KG-865. Enjoy excellent hi-fi at low cost with this popular stereo amplifier kit. Powerful 60-watt output drives any speaker systems for impressive hi-fi sound. All silicon transistor circuit, usually found only in higher-priced amplifiers, assures super stability, high reliability, and smooth sound. Handsome design with wood-accented front panel. A perfect beginning for an amplifier-turntable system. Add the KG-796 FM tuner kit (facing page) to enjoy stereo FM, and AM, too.

Special Complementary Symmetry Circuit eliminates all driver and output transformers, providing exceptionally wide frequency response and power bandwidth. Delivers full rated power from 20-20,000 Hz. Frequency response is within 1 dB from 18-30,000 Hz for startlingly realistic sound from deep bass to crystal-clear highs. Boasts premium semiconductors, including special preamplifier transistors that slash internal noise.

An array of controls puts you in command of both stereo and monophonic functions. Even has a separate on-off switch so that volume control settings never need be disturbed. Ganged volume, bass and treble controls. Front-panel stereo headphone jack and speaker muting switch. Convenient selector switch for phono, tuner and auxiliary allows instant control of a variety of sound sources.

Pilot light indicates when the amplifier is on. Printed circuit boards for easier assembly. Attractive heavy-gauge extruded aluminum front panel with walnut-finish inserts. Inputs for magnetic cartridge, tuner and auxiliary. Two AC outlets on rear of chassis. Size, 3$\frac{5}{16}$x13x10". With solder, step-by-step instructions. Takes optional case below.

22 A 3700 X. Shpg. wt., 10 lbs.	69.95
22 A 3713 X. Oiled Walnut Wood Case. Shpg wt., 6 lbs.	**12.95**

SPECIFICATIONS

Output at 4 Ohms: 60 watts ±1 dB, 30 watts per channel; 50 watts IHF, 34 watts sine wave. *Response:* ±1 dB, 18-30,000 Hz. *Power Bandwidth:* 20-20,000 Hz at 1% harmonic distortion. *Hum and Noise:* Tuner, Aux. inputs, −65 dB; Mag. Phono, −60 dB. *Channel Separation:* over 50 dB. *Impedances:* 4-16 ohms; plus stereo headphones. *Damping Factor:* 50. *IM Distortion:* under 1% at 60 Hz and 7000 Hz mixed 4:1 at rated power. *Input Sensitivity:* Mag. Phono, 5 mV; Tuner and Aux, 400 mV. *Power Requirement:* 110-130 volts, 60 Hz AC.

Knight-Kit's Stereo FM-AM Tuner features silicon-transistor circuit for fine performance, plus new Modular Concept* design for easier kit assembly

Sensitive FM circuit with TWO tuned RF stages for excellent hi-fi stereo pulling power even from weak or distant stations . . AM circuit has wide bandwidth for maximum fidelity . . FM frequency response equals the finest stereo records or tapes

69^{95} less case

$5 monthly *see page 438*

AM FM FM-AUTO
TUNING
MODEL KG-796
Knight
AFC
OFF ON
POWER
OFF ON
SOLID STATE STEREO TUNER

ght-Kit KG-796. Even in Knight-Kit's budget priced stereo FM-AM tuner you get all silicon transistors, sensitive stereo FM reception that you uld expect only from higher-priced tuners, plus quality AM. Pulls in ellent hi-fi FM stereo even from weak or distant stations. Silicon transis-s assure super-stability and freedom from distortion. Assembly is simpli-l by the Modular Concept* featuring wired printed circuits and aligned and IF stages.

I circuit has *two* tuned RF stages to cut interference and assure high sitivity. Wideband IF circuits and wideband detector permit a smooth quency response from 30-15,000 Hz for FM stereo realism that equals or passes the finest stereo records or tapes. Even the AM circuit has a full kHz IF bandwidth for maximum fidelity; special filter circuit screens out istles on weak or distant stations. Signal-strength tuning meter and edge-tuning dial make station-finding easy. FM stereo indicator lights up and cuit automatically switches to stereo when a stereo program is tuned in.

autifully styled heavy-duty aluminum front panel, with walnut-finished erts, for the appearance of an expensive factory-assembled tuner, and fect matching with the KG-865 Stereo Amplifier kit. Effortless flywheel ing. Size, 3$\frac{5}{16}$x13x10″. With indoor dipole FM antenna, solder, step-by-p instructions. Takes optional case below. For operation from 110-120 ts, 60 Hz AC.

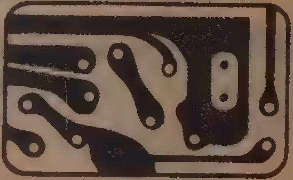
A 3918 X. Shpg. wt., 7 lbs. **69.95**

A 3713 X. Oiled Walnut Wood Case. Wt., 6 lbs. **12.95**

SPECIFICATIONS

CIRCUIT. *Usable IHF Sensitivity:* 3 microvolts. *Response:* ±1 dB, 30-15,000 . *Harmonic Distortion:* less than 1.0%. *Hum and Noise:* −50 dB. *Tuning nge:* 88-108 MHz. *Capture Ratio:* 3 dB. *IF Rejection:* more than 80 dB. *age Rejection:* greater than 50 dB. *Output Voltage:* 0.8 volt with 1000 μV ut signal, 100% modulated at 400 Hz. *Channel Separation:* 35 dB or more l kHz. *SCA Rejection:* 35 dB or more. *Antenna:* 300-ohm input. **AM CUIT.** *Sensitivity:* 50 μV for 20 dB signal-to-noise ratio at 600 kHz. *Band-lth:* 10 kHz at 25-dB-down points. *Hum and Noise:* 38 dB. *Rejection; IF:* ninal 35 dB at 1000 kHz; *Image:* 35 dB.

*MODULAR CONCEPT
Critical Circuits are assembled and tested READY-TO-USE



Knight-Kit's new concept gives you these FOUR SPECIAL ADVANTAGES:

Simplified Assembly. Most parts are mounted, and soldered, on PC boards. Boards mount quickly and easily on chassis. All you do is solder interconnections.

Better Performance and Dependability. Critical PC board circuits are wired and aligned at the factory.

Faster Assembly Time. Most small parts are already mounted and soldered in boards, reducing assembly time.

Satisfaction and Enjoyment. You have the satisfaction of assembling the kit yourself, plus the dependability of a factory-assembled model.

knight-kit
STEREO HI-FI

Save up to $77.15 . . Stereo Systems with Knight-Kit 60-watt amplifier kit

Budget System with Garrard 40B and Allied 8″ speaker systems

Save $43.25 **169^{50}**

Separately, $212.75. Allied's Knight-Kit KG-865 silicon solid-state 60-watt Stereo Amplifier Kit ±1 dB, 18-30,000 Hz response for real-as-life stereo. Controls and inputs for nearly all sources. With walnut Case. Garrard 40B 4-speed Automatic Turntable has counter-balanced arm with stylus pressure adjustment. With Base. Empire 808E elliptical-stylus Stereo Cartridge. Two Allied 3007 three-way walnut Speaker Systems with dual-cone 8″ woofer, 3½″ tweeter. With cables, hi-fi booklet.
22 A 0346 D7U. Shpg. wt., 65 lbs. **169.50**

ALTERNATE SYSTEM WITH TUNER

Separately, $295.65. Save $49.15. As above, but also includes Knight-Kit KG-796 Stereo FM-AM Kit with walnut case. Perfectly matched components.
22 A 0347 D9U. Shpg. wt., 75 lbs. **246.50**

Big-value System with Garrard SL72B and Allied 12″ speaker system kits

Save $69.25 **259^{50}** with case

Separately, $328.75. Knight-Kit KG-865 60-watt Stereo Amplifier Kit has silicon transistors for superior stereo. With walnut Case. Garrard SL-72B Automatic Turntable has Synchro-Lab motor for perfect pitch at all 4 speeds. Has cuing, anti-skating, damped pickup arm. With Base. Pickering V15/ACE-3 Stereo Cartridge has elliptical stylus and "Dustamatic" brush. Two Allied 2330AK 3-way 12″ walnut Speaker System Kits, 12″ woofer, 8″ midrange, 3½″ tweeter. Cables, booklet.
22 A 0344 D7Z. Shpg. wt., 101 lbs. **259.50**

ALTERNATE SYSTEM WITH TUNER

Separately, $411.65. Save $77.15. Above, but also with Knight-Kit KG-796 Stereo FM-AM Tuner Kit and Case. Pulls in stereocasts; two tuned RF stages on FM.
22 A 0345 D9U. Shpg. wt., 117 lbs. **334.50**

Custom System with Garrard SL75B and two Allied 3-way 12″ speakers

Save $61.30 **249^{50}** less case

Separately, $310.80. Knight-Kit KG-865 60-watt Stereo Amplifier Kit has silicon transistor circuit. Takes optional case below. Garrard SL-75B 4-speed Automatic Turntable has cuing and pause controls. With Base. Pickering V15/AME-3 Stereo Cartridge has elliptical needle, brush. Two Allied 888HCA 3-way 12″ speakers with 12″ woofer cone, midrange cone, tweeter. With cables, hi-fi booklet.
22 A 0348 D6U. Shpg. wt., 52 lbs. **249.50**
22 A 3713 X. Case for KG-865, KG-796. 6 lbs. Ea. **12.95**

ALTERNATE SYSTEM WITH TUNER

Separately, $380.75. Save $66.25. Above system, plus silicon-transistor Knight-Kit KG-796 Stereo FM-AM Tuner Kit. Optional amplifier and tuner cases above.
22 A 0349 D7U. Shpg. wt., 62 lbs. **314.50**

Save up to $91.70 on Stereo Systems with Knight-Kit KG-865 solid-state 60-watt stereo amplifier kit

Custom System with Garrard 40B and Allied 3-way 12″ Speakers

Save $30.30 169^{50} less [illegible]

eparately, $199.80. A fine selection of carefully atched components for good stereo at a low price. night-Kit 60-watt Stereo Amplifier Kit has premim semiconductors including special preamp transtors that cut distortion to the vanishing point. ptional case below. Garrard 40B 4-speed Autoatic Turntable includes Base. Empire 808E Stereo artridge. Two Allied 830BHC 12″ Speakers have ll-range sound. With cables, hi-fi booklet.

A 0350 D6U. Shpg. wt., 47 lbs. 169.50
A 3713 X. Walnut Wood Case. Wt., 6 lbs. . . 12.95

ALTERNATE SYSTEM WITH TUNER

parately, $269.75. *Save $40.25.* Above, plus night-Kit KG-796 Stereo FM-AM Tuner Kit for erything in stereo hi-fi. Optional case above.
A 0351 D7U. Shpg. wt., 57 lbs. 229.50

Prestige System with Garrard SL75B and Allied 3-way 12″ speaker systems

Save $78.80 279^{50} with case

Separately, $358.30. Prestige components at a moderate price. Knight-Kit KG-865 60-watt silicon-transistor Stereo Amplifier Kit includes walnut Case. Garrard SL-75B Automatic Turntable has Synchro-Lab motor for perfect 3-speed accuracy. With Base. Shure M32E elliptical-stylus Stereo Cartridge. Two Allied 3030B 3-way 12″ walnut Speaker Systems have full 12″ woofer, 6″ midrange and 3½″ tweeter. With cables and hi-fi booklet.
22 A 0352 D7Z. Shpg. wt., 90 lbs. 279.50

ALTERNATE SYSTEM WITH TUNER

Separately, $441.20. Save $91.70. Above, but you also get Knight-Kit's KG-796 Stereo FM-AM Tuner Kit and walnut Case for a complete FM-phono system.
22 A 0353 D9Z. Shpg. wt., 106 lbs. 349.50

Knight-Kit Stereo FM-AM Tuner Kit and Stereo Amplifier Kit Package

Save $16.00 149^{80} with cases

KG-865 Amplifier plus KG-796 Tuner . . perfectly matched pair at one low price!

Separately, $165.80. Special combination offer of two kits that are perfectly matched for great performance and smart appearance. Knight-Kit KG-865 60-watt Stereo Amplifier has all silicon transistors, delivers full rated power from 18-30,000 Hz. Frequency response is flat from 10-15,000 Hz. Knight-Kit KG-796 Stereo FM-AM Tuner also has all silicon transistors for circuit stability, plus highest quality FM and AM reception. Tuner kit has "Modular Concept" design for easier kit assembly and performance comparable to factory assembled tuners costing much more. With all necessary cables, hi-fi booklet, and oiled walnut wood cases.
22 A 0354 L4X. Shpg. wt., 32 lbs. 149.80

knight-kit
STEREO
HI-FI

Knight-Kit/Koss deluxe Stereo Headphone Kit with separate volume control for each ear

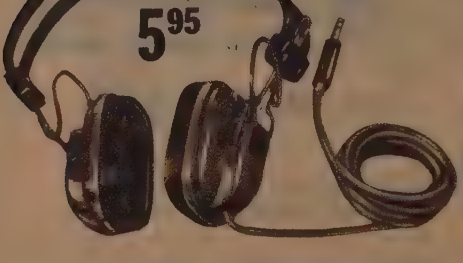
14.95

Knight-Kit KG-802. These easy-to-assemble headphones actually outperform many factory-assembled models that cost much more. They are made to our specifications by Koss, one of the leaders in stereo headphones. You'll be amazed by the wide-response hi-fi sound. These headphones bring you "closer" to the music than speakers, and give you total channel separation. Best of all, you can enjoy everything from Brubeck to Bach, at full volume, even at midnight—without bothering anyone.

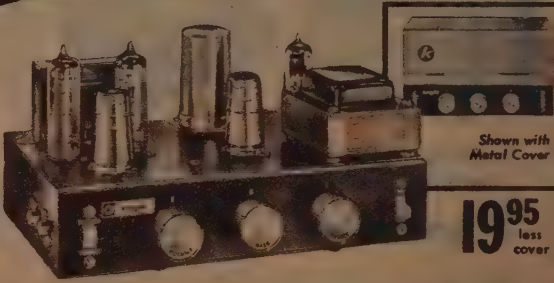
Excellent for use when monitoring tapes or recording sessions. Or listen in during your jam sessions to hear the big sound as the audience hears it. Comfortable foam-cushioned earcups help seal out room resonance, false echo, and distracting noises so you can hear stereo music at its best. Durable lightweight plastic headband is fully adjustable to provide hours of relaxed listening pleasure with no feeling of fatigue.

Large 3½" dynamic elements deliver smooth frequency response from 20-16,000 Hz. Separate volume controls in each earpiece (for right and left channels) assure perfect balance. And you don't have to get out of your chair to change volume. Impedance of 4-16 ohms matches any stereo amplifier. With 8-ft. cord with standard ¼" phone plug. With solder and detailed step-by-step instructions.

22 A 3380 X. Shpg. wt., 2½ lbs. 14.95



5.95



Shown with Metal Cover

19.95 less cover

Low-cost Stereo Headphone Kit

Knight-Kit KG-801. Amazing low price for stereo headphones of this quality. This headphone kit reproduces stereo with good realism and response. Large earcushions seal out room noises, a real aid when listening to soft musical passages. Provides fully private listening; lets you have all the volume you want without disturbing others. Adjustable headband and padded earcushions for maximum comfort. So light in weight, you hardly know you're wearing them. Frequency response, 20-15,000 Hz. With 6-foot cord and standard ¼" phone plug that fits most stereo amplifiers and receivers. With all parts and step-by-step assembly instructions. From Japan.

22 A 3359 X. Shpg. wt., 1 lb. 5.95

Monophonic hi-fi Amplifier Kit

Knight-Kit KM-15. A big value in a 14-watt utility amplifier kit that's ideal as the "heart" of an inexpensive music system, or as an "add on" second channel to convert your monophonic system to stereo. Push-pull output for smooth, clean response from 30-15,000 Hz. Built-in equalized preamp for magnetic phono cartridge. High-level input for tuner or ceramic phono cartridge. Controls: Volume, Bass, Treble. Switches: Phono-Tuner, On-Off. Output: 14 watts IHF music power. Output impedances: 4, 8, and 16 ohms. Jet black chassis. With instructions. Optional cover below. For 110-130 VAC. Japan.

22 A 3784 X. Shpg. wt., 8 lbs. 19.95

22 A 3783 X. Metal Cover. Gray, chromed trim. 2 lbs. 4.50

SHIPPING NOTE: Items with suffix U, W or Z in stock no. sent truck or express. See Ordering Information pages

Guitar Amplifier Kit with assembled Speaker System

Professional-quality 90-watt solid-state Amplifier Kit plus two 12" Jensen Speakers

149.95 $8 monthly *see page 438*

Knight-Kit KG-387. This professional outfit makes even the best groups sound bigger and better. Has 90-watt peak power amplifier with a full array of controls, plus factory assembled speaker system featuring two Jensen heavy-duty 12" speakers. Amplifier rides "piggyback" atop speaker enclosure and is connected with a convenient plug-in cord.

Dual channels have two inputs per channel. Normal channel is designed for lead rhythm or bass guitar, voice, sitar, etc. Second channel features special tonal effects—tremolo with separate intensity and rate controls, and reverberation using the popular Hammond reverb unit. Foot switch jack on control panel for remote switching of tremolo and reverb.

Separate bass and treble controls boost or cut either channel independently. FET's in preamps for distortion-free music. All knobs, switches, inputs and outputs placed for fingertip control. Speaker, amplifier enclosures covered with gray tangle-tweed Tolex. Speaker, 26½x22¼x10"; amplifier, 5¾x19¾x8¾". With precut wire, solder, instructions. 115 VAC.

22 A 3328 Z. Shpg. wt., 60 lbs............149.95

SPECIFICATIONS

Power Output: 90 watts peak; 30 watts rms. *Bass Boost:* 9 dB min. at 80 Hz. *Treble Variation:* 20 dB at 10,000 Hz. *Reverb Depth:* Variable, 0-50%. *Tremolo Depth:* Variable, 0-75%. *Tremolo Speed:* Variable, 2-10 Hz. *Controls:* Normal channel—Volume, Treble, Bass; Second Channel—Volume, Treble, Bass, Tremolo Intensity, Tremolo Rate, Reverb Depth. *Signal/Noise:* 60 dB below 90 watts. *Input Sensitivity:* 40 mV for 90 watts. *Input Impedance:* 500,000 ohms. *Input Capacity:* 10 pF, max. *Semiconductors:* 16 transistors, 6 diodes (including 4 rectifiers).

Solid-state electronic Fuzz Box Kit for any electric guitar

It's the greatest . . tunes your group on to today's young sound

12.95

FUZZ TONE
VOLUME
KG-389 FUZZ BOX
knight
AMPLIFIER

Knight-Kit KG-389. Turn on this electronic fuzz box, and your audiences too, for the wildest sound they ever heard. You can have a ball and save money doing it with this fuzz box kit. Metal construction to take the brutal beating of a typical jam session. Attack control varies sound effect. Volume control and foot switch. Uses one 9-V battery (order below). Standard ¼" plug-in acks for instrument and amplifier. With precut wire, solder, instructions. 2¾x6x3½".

22 A 3336 X. Shpg. wt., 4 lbs.............12.95

18 A 5980. 9-V Battery. 6 oz...............2/59¢

Knight-Kits are a product of Allied Radio

SCHOBER

ELECTRONIC
ORGAN KIT

Electronic Spinet Organ Kit . .
big-church sound at a low price

WITH BENCH 499^50^ $21 monthly†

Authentic pipe sound for wide tonal range . . 14 distinct voice selections

Electronic organ is small enough to fit any room, yet has a sound to rival many churc organs. Assembly is surprisingly simple . . 98% o the wiring is on 14 printed circuit boards.

Keyboards: upper manual has 36 notes. Lowe manual has 29 notes. Manuals overlap to pro duce total of 41 notes. Pedal clavier has 13 notes Plays 14 distinct voices singly or in combination Upper manual voices include: diapason, vo humana, string, french horn, oboe, tibia, cello saxophone, tuba, trumpet. Lower manual: dul ciana, diapason, flute, horn.

Solid-state amplifier rated 25 watts rms. Full size 12″ bass speaker, plus 6x9″ treble speaker Sanded, walnut-veneer console and bench read to assemble (order oil finishing kit below). Solde is included (order soldering iron on facing pag —*no other is satisfactory*). Size, 34x38x22¾ For 117 VAC. Truck or express from New York Shpg. wt., 140 lbs.

22 A 3329 ZF. Complete Organ Kit. 499.5
22 A 9588. Oil Finishing Kit. Wt., 2 lbs. 4.9
22 A 9589. Demonstration Record. Wt., 8 oz. . .50

knight
TEMPO
SLOW
FAST
RHYTHM
VOLUME
OFF
START STOP
SOLO
COMBO SIDEMAN

"Combo Sideman"
electronic rhythm section
by Knight-Kit®

49^95^ $5 monthly†

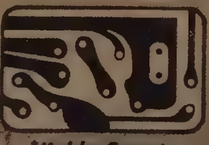
- Electronic sound sensation
- Excellent accompaniment for solo guitarists, combos

Knight-Kit KG-392. Whatever you dig—hard rock or folk rock, you'll have the rhythm to back it. Combo Sideman provides 3 basic rhythm instrument sounds, bass drum, snare drum and cymbals, with amazing realism. These sounds are generated and can be mixed in various combinations to produce six precise, perfectly timed rhythms for practice or performance. Just plug the Combo Sideman into your amplifier to put the power of percussion behind you.

Tap the start/stop button and a continuous rhythm starts. The same button stops it. Select any one of 6 different rhythms, or change from one to another while playing. Tempo control knob speeds or slows the rhythm. Solo button provides single, repetitive drum beats. Exciting addition to rock combos.

Easy to build . . assembly is greatly simplified by Knight-Kit's *Modular Concept (see page 447) featuring pre-wired printed circuits. With 9-volt battery. Only 7½x7¼x2″. From Japan.

22 A 3916 X. Shpg. wt., 3 lbs. 49.95
18 A 5980. Extra battery. Wt., 6 oz. . . . .**Pkg. of 2 for 59¢**



Modular Concept ..see page 447

Portable Dynabeat Kit gives you the sounds of live rhythm instruments

SCHOBER
MUSICAL KITS

139.50 $7 monthly†

Complete rhythm section . . great for modern combos

Schober
PORTABLE DYNABEAT

Big-beat sound of bass drum, snare drum, cymbal, others
Single or combination sounds

ortable Dynabeat produces all the musical rhythm per- ussive sounds as realistically as a professional drummer ehind a full array of rhythm instruments. With the Dyna- eat you *are* the drummer! Fingertip-operated pushbuttons et you produce the sounds of 10 different rhythm instru- ients so authentically that listeners can't tell the difference. . booming bass drum; a tom-tom; two wood blocks (high itched and low pitched); two cymbals (one stroked by rushes, the other a dramatic crash); two bongos (high nd low pitched); the snare drum with beats or roll; casta- ets, with short burst or long roll. Play them singly or in combinations of two or more, or all at the same time . . any way you like and in any rhythm. Sensational for modern rock combos. Plugs into any amplifier. Has volume control, illuminated on-off switch. With instructions, amplifier connecting cable. (Order solder and soldering iron below, left—*no other soldering equipment is satisfactory.*) Size, 6⅜x15¾x 6¾". For 110-120 V, 50-60 Hz AC.

22 A 9571 X. Shpg. wt., 6 lbs. 139.50
22 A 9572 X. Assembled Dynabeat. Wt., 6 lbs. 169.50
22 A 3243. Demonstration Record. Wt., 8 oz. . . . . 50¢

Portable Tunesmith Kit plays infinite variety of vibrato effects

149.50 $8 monthly†

Schober TUNESMITH
VOLUME
VOICE
VIBRATO

ne portable Tunesmith plays single-note melodies with brato effects approximating violin, cello, oboe, trumpet, gan, flute, saxophone. Play the keyboard with the right nd and operate the control board with the left. Turn on y one of the different voices, then turn the control knobs r the desired vibrato depth, volume and speed. Changes om one voice to another without breaking rhythm. An eal combo instrument. The 32-pitch keyboard ranges om F below middle C to two octaves above middle C. brato control is continuously variable from no vibrato lear, unwavering tone) to the smoothest full vibrato (*real vibrato*—a true variation in pitch, not simply a volume change). Tuning knob raises or lowers range of entire instrument about ½ tone. Vibrato speed; voice selection; volume control; vibrato control. Plugs into any guitar, public address or hi-fi amplifier. Includes 12-ft. connector cable and plug. Easy to assemble. (*Order solder and iron below—no other is satisfactory.*) 4⅝x27¼x8⅞". 117 VAC.

22 A 9569 X. Shpg. wt., 14 lbs. 149.50
22 A 9570 X. Assembled Tunesmith. Wt., 14 lbs. 189.50
22 A 3242. Demonstration Record. Wt., 8 oz. . . . . 50¢

Ungar Soldering Iron

(Not illustrated.) Use this iron for assembling all kits on these two pages. Excellent for other printed circuit work, too. Ungar soldering iron includes #776 soldering handle with cord, 37½-watt #1235 thread-in element, 1" long #PL333 copper tiplet. For 110-120 volts, 60 Hz AC.

22 A 3166. Wt., 1 lb. 3.50

Ersin Multiscore Solder

(Not illustrated.) Non-corrosive flux. 60% tin, 40% lead. 16 gauge wire. 1-lb. spool.

26 A 1730. Wt., 1¾ lbs. 3.34

Easy-to-use electric organ Autotuner Kit

- **Tunes electric organs quickly and accurately**
- **No special skill required**

48.50 $5 monthly†

Schober
AUTOTUNER

The Autotuner is a stroboscopic device that makes you an organ tuner—instantly! Natural "ear" or talent not required. For Baldwin, Thomas, Lowrey, Wurlitzer, Conn, most combo organs, others. Not necessary for KG-388 on facing page (tuning method is included). *Assemble with solder and iron at left—no other is satisfactory.* For 117 VAC.

22 A 9573 X. Shpg. wt., 4½ lbs. 48.50
22 A 9574 X. Assembled. 4½ lbs. 68.50

DYNACO

STEREO HI-FI KITS

Perfectionists' dream! Silicon solid-state Stereo Preamplifier Kit

Kit form	Assembled
89^{95}	129^{95}
$5 monthly*	$7 monthly*

- One of the best preamps ever made—a proven performer
- Silicon transistor circuit has 10-100,000Hz response
- Controls and inputs for all sources, including guitar
- Virtually unmeasurable distortion levels
- Includes smart metal case with gold color panel

Model PAT-4. Dynaco's finest stereo preamplifier kit. It's the ideal mate for the "Stereo 120," "Stereo 80," or any other quality basic power amplifier. Superb solid-state design features premium silicon transistors for superior stability and low noise. Positive-action rocker switches control volume, tape monitor, power, rumble filter and dual modes. Four-position high filter. Has six-position program selector switch, balance control, and dual-concentric bass and treble tone controls. Inputs for high and low level phono cartridges, tape head, tuner, tape recorder and auxiliary. Front-panel input for guitar, microphone or recorder; front-panel output for recorder. Frequency Response: ±0.5 dB, 10-100,000 Hz. Harmonic Distortion: 0.05% at 2 volts output. IM Distortion: 0.05% at 2 volts output. Mag. Phono Input Hum and Noise: 70 dB below 10 µV input. Metal case with satin gold aluminum front panel. Size, 4¼x13½x8″. For 120/240 volts, 50-60 Hz AC. Wt., 11 lbs.

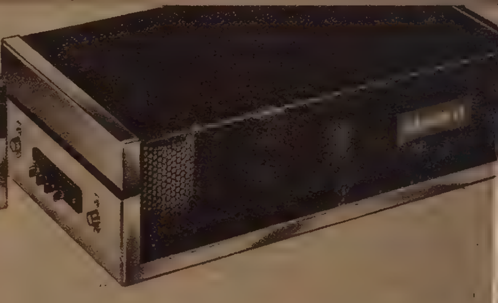
13 A 2235 X. Kit Form	89.95
13 A 2241 X. Factory-Assembled	129.95

"Stereo 120" 120-watt Basic Amplifier

Kit form 159^{95} Factory assembled 199^{95}

Dynaco's best! Solid-state stereo amplifier has silicon transistors for thermal stability. Oversize power transformer and regulated power supply provide full output power over the entire audio frequency spectrum. Self-regulated bias and over load circuit protect audio transistors. Power: 60 watts rms per channel at 8 ohms. Transformerless audio circuit assures the widest possible response: ±0.5 dB, 5-100,000 Hz. Harmonic Distortion: 0.5%. IM Distortion: less than 0.5%. Power Bandwidth: 5-50,000 Hz. Hum and Noise: 95 dB below rated output. Output Impedance: 4-16 ohms. Input: 1.5 volts into 100,000 ohms for rated output. Use with PAT-4, PAS-3X or any other good stereo preamplifier. Plated chassis with metal cover. Size, 4x13x10½″. Instructions. 120/240 V, 50-60 Hz AC. Shpg. wt., 20 lbs.

13 A 2233 U. Kit Form	159.95
13 A 2234 U. Factory Assembled	199.95



"Stereo 80" 80-watt Basic Amplifier

Kit form 119^{95} Factory assembled 159^{95}

Professional-quality solid-state stereo power amplifie
with silicon transistors for high reliability and fine
sound. Transformerless output stage assures ultra-wid
response and clean, undistorted sound over the enti
audio frequency spectrum. Factory wired etched circui
assure easier assembly. Output stage is fully protecte
against short-circuits or overloads. Power: 40 watts p
channel rms at 8 ohms. Response: ±0.5 dB, 15-15,0
Hz. Harmonic Distortion: 0,5%. IM Distortion: less th
0.1%. Power Bandwidth: 6-50,000 Hz IHF. Hum a
Noise: 95 dB below rated output. Outputs: 4-16 ohm
Input: 1.3 volts into 100,000 ohms for rated output. U
with PAT-4, PAS-3X or any other quality stereo pr
amplifier. With metal cover. Size, 4¼x13½x9″. Instru
tions. 120/240 V, 50-60 Hz AC. Shpg. wt., 20 lbs.

13 A 2137 U. Kit Form	119.
13 A 2091 U. Factory Assembled	159.

*See page 438 for full Credit deta

Silicon solid-state stereo Amplifier Kit with powerful 80-watt rms output

DYNACO

STEREO HI-FI KITS

Kit form

169^{95}

$9 monthly*

Assembled

249^{95}

$13 monthly*

dynaco AMPLIFIER

- Connoisseur-quality stereo at a moderate price
- Tape monitor facilities for 3-head tape decks
- Silicon transistors for finest hi-fi sound

Model SCA-80. Premium-quality solid-state stereo control amplifier kit delivers 80 watts of rms power, enough to drive two sets of low-efficiency speaker systems to concert hall volume. Silicon transistor circuit. Ganged bass, treble, balance and volume controls. Rocker switches control AC power, loudness compensation, tape monitor, noise filter, mono/stereo/blend mode and speaker system selector. Also has stereo headphone jack. Power: 40 watts rms per channel at 8 ohms. Response: ±0.5 dB, 15-50,000 Hz. Power Bandwidth: 6-50,000 Hz. IM Distortion: less than 0.1%. Hum and Noise: Phono, −60 dB; Aux., −80 dB. Input Sensitivity: Phono, 3 mV; Aux., .13 V. With satin gold front panel and metal case. 4¼x13½x10″. 120/240 V, 50-60 Hz AC. Wt., 16 lbs.

13 A 2136 U. Kit Form..169.95
13 A 2090 U. Factory Assembled..249.95

Buy these Dynaco Units and get the quality of Separates at low cost

DYNA STEREO AMPLIFIER

Virtually distortionless Stereo Amplifier Kit is perfect for compact systems

it rm **99^{95}**

Features extremely wide power bandwidth and low distortion for great hi-fi

odel SCA-35. Powerful, moderately priced integrated plifier features full inputs, outputs and controls for music sources. Has selector switch for tape head, radio, ono, tape and spare. Also has ganged bass and treble trols, balance control, mono/stereo mode switch, loudss compensation, scratch filter and AC power switch. ovision for connecting monophonic center-channel speak- Has hum, balance controls and 2 AC outlets at rear of assis. Power Output. 17.5 watts rms per channel. Reonse: ±0.25 dB, 20-20,000 Hz. IM and Harmonic Distion: less than 1% at rated output. Hum and Noise: 80 down. Outputs: tape, 8-16 ohms. 4¼x13½x10″. With tal case. 120 V, 60 Hz AC. Wt., 21 lbs.

A 2590 U. Kit Form..99.95
A 2595 U. Factory Assembled..139.95

DYNA FM TUNER
STEREO

Sensitive Stereo FM Tuner famous for easy assembly and clean sound

Kit form **99^{95}**

Sophisticated design and non-critical alignment assure superb performance

Model FM-3. Broadcast quality at a budget price! Superb stereo FM tuner kit features cathode-coupled RF stage and slug-tuned coils for laboratory-accurate alignment without the use of special tools or equipment. Also has wideband discriminator and four progressive-limiting IF stages for virtually noise-free and distortion-free FM reception. Smooth planetary drive, "bar" type "Magic Eye" and stereo indicator light permit easy pinpoint tuning accuracy. Time-switching multiplex provides 30 dB stereo FM separation. FM Sensitivity: 4 μV IHF. Signal-to-Noise Ratio: 70 dB. IM Distortion: 0.5%. Response: ±.5 dB, 10-15,000 Hz. Output: 2 volts. With metal case. Size, 4¼x13x8″. 120 V, 60 Hz AC. Shpg. wt., 13 lbs.

13 A 2588 X. Kit Form..99.95
13 A 2589 X. Factory Assembled..154.95

DYNACO

STEREO HI-FI KITS

Superb tube-type stereo and mono hi-fi components . . easy to build

70-watt basic Stereo Amplifier Kit
.. a favorite with perfectionists

Kit form 99^{95}

$5 monthly*

Wide power bandwidth, low distortion and powerful output make this one of the finest basics available

Dynaco's "Stereo 70" basic amplifier kit has ultra-wide response and plenty of power. Prewired etched circuits, detailed instructions and large pictorials make this an amazingly simple kit to build. Absolute stability and professional performance is assured by the use of conservatively operated, premium components. Power: 70 watts rms. IM Distortion: less than 1%. Response: ±0.5 dB, 10-40,000 Hz. Hum and Noise: −90 dB. Sensitivity: 1.3 V for rated output. Four EL34 output tubes. With cage. Perfect companion for PAS-3X preamp. 6½x9½x13". 120 VAC. Shpg. wt., 31 lbs.

13 A 2237 U. Kit Form........................99.95
13 A 2238 U. Factory Assembled...............129.95

Kit form 59^{95} $5 monthly*

35-watt Basic Amplifier Kit

"Stereo 35," similar to above. 35 watts rms. Response: ±1 dB, 10-40,000 Hz. Harmonic Distortion: less than 1% at rated output. 8, 16 ohms. With cover. Perfect companion for PAS-3X preamp. Size, 4x5½x13". 110-120 V 50-60 Hz. AC. Shpg. wt., 16 lbs.

13 A 2593 X. Kit Form........................59.95
13 A 2594 X. Factory Assembled...............79.95

Kit form 69^{95} $5 monthly*

Full-feature Stereo Preamplifier Kit

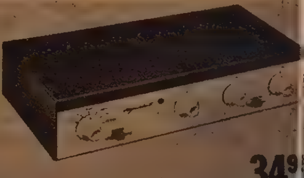
Model PAS-3X. Most advanced preamp in the PAS Series features prewired etched critical circuits for easier kit assembly. DC on tube filaments prevents hum. Slide switches control AC power, tape monitor, scratch filter and loudness compensation. Rotary switches control mode and program selector for phono, tape head, tuner and tape recorder. Separate bass and treble tone controls for each channel. 5-tube circuit has wide response: ±0.5 dB, 10-40,000 Hz. IM Distortion: less than .05% at 2 volts output. Virtually unmeasurable harmonic distortion. Satin gold front panel. With metal case. 4x 13x8". For 120 VAC. Shpg. wt., 11 lbs.

13 A 2242 X. Kit Form........................69.95
13 A 2236 X. Factory Assembled...............109.95

Buy one amplifier for powerful mono hi-fi . . buy a pair for super-stereo! Power ratings are both rms!

Kit form 59^{95}

79^{95} Kit



34^{9}

40-watt basic Amplifier Kit

Model Mark IV. Deluxe monophonic amplifier has prewired etched circuits for easy assembly. Dyna Biaset maintains output tube bias regardless of tube aging. Response: ±0.5 dB, 10-40,000 Hz. IM Distortion: below 1%. Hum and Noise: −90 dB. Outputs: 4-16 ohms. 7x14x5". With cover. 120 VAC. Shpg. wt., 20 lbs.

13 A 2265 U. Kit Form...........59.95
13 A 2266 U. Assembled..........79.95

60-watt basic Amplifier Kit

Model Mark III. Dynaco's most powerful mono amplifier has prewired etched circuits for easy assembly, Biaset output tube bias regulation maintains peak performance. Response: ±0.5 dB, 10-60,000 Hz. Distortion: under 1%. Hum and Noise: −90 dB. Outputs: 4-16 ohms. 6¾x9x9". With cover. 120 VAC. Shpg. wt., 28 lbs.

13 A 2267 U. Kit Form...........79.95
13 A 2268 U. Assembled..........99.95

Monophonic Preamplifier Kit

Model PAM-1. Premium-quality kit h 1% precision resistors and other pr fessional components for flawless pe formance. Has facilities for all mu sources including tape monitor. R sponse: ±0.5 dB, 10-40,000 Hz. Di tortion: .05%. With cover. 2¾x1 6". No power supply; takes power fro Mark III or IV. Wt., 7 lbs.

13 A 2246 X. Kit Form...........34.
13 A 2247 X. Assembled..........59.

**Buy with no money down—see page 438 for full Credit deta*

Easy-to-assemble silicon-transistor Stereo Component Kits from Scott

SCOTT KITS

STEREO HI-FI

Widely acclaimed Scott stereo component kits feature ease of assembly, attractive styling and the latest solid-state devices including field-effect-transistors, integrated circuits and silicon transistors for magnificent stereo hi-fi

135-watt ereo FM-AM leceiver Kit ith FETs, ICs

299^{95} less case

15 monthly*

- lver-plated field-effect-transistor front-end for amazing sensitivity
- tegrated circuits in IF strip for maximum FM stability
- utomatic stereo/mono FM switching
- utomatic Variable Bandwidth for the finest AM reception
- licon transistors for finest stereo sound and greater reliability
- omplete tape monitoring facilities
- ont-panel mike and headphone jacks
- ain/remote speaker selector switches

Model LR88. Superb kit receiver has silicon transistors for finest sound and greater reliability. Silver-plated field-effect-transistor front-end and integrated circuits in the IF strip assure sensitive, noise-free FM reception and outstanding stereo FM separation. Offers excellent AM too. Flywheel tuning, center channel and signal-strength tuning meters, and stereo indicator light simplify tuning. Has between-station quieting on FM and automatic stereo/mono FM switching.

Has pushbutton switches for loudness contour, tape monitor, scratch and rumble filters, and main and remote speakers. Front-panel jacks for mikes and stereo headphones. Power output at 4 ohms: 135 watts ±1 dB, 100 watts IHF. 32 watts rms per channel at 8 ohms. Frequency response: ±1 dB, 15-30,000 Hz. Sensitivity: 1.9 µV. Harmonic Distortion: 0.8%. FM Separation: 40 dB. Size, 5½x17½x14⅞". Takes optional case below. For 117 VAC.

13 A 2011 U. Shpg. wt., 26 lbs. 299.95
13 A 2733 X. Oiled Walnut Wood Case. Shpg. wt., 6 lbs. 26.95

160-watt Stereo Amplifier Kit drives any speaker systems

149^{95} less case

el LK-60B. Powerful high-performance stereo amplifier gives you fingertip command of 160 watts. Silicon-sistor transformerless output stage assures wide re-nse and power bandwidth. Features tape monitor, loud- contour, scratch and rumble filters, main/remote kers switch and stereo headphone jack. Power output ohms: 160 watts ±1 dB, 120 watts IHF. 40 watts rms channel at 8 ohms. Response: ±1 dB, 15-30,000 Hz. monic Distortion: 0.8%. Inputs: tape, magnetic phono, liary and tape monitor. Outputs: 4-16 ohms, tape, eo headphones. Black vinyl-finish chassis enclosure. x15½x13¼". Optional case at right. 117 VAC.

2738 U. Shpg. wt., 21 lbs. 149.95

Sensitive Stereo FM Tuner Kit has field-effect-transistors

149^{95} less case

Model LT-112B-1. Super-sensitive tuner kit features three-function meter to show signal strength and "O center," plus multipath signals (ghosts) to permit perfect antenna orientation for finest reception. Silver-plated front end, silicon-transistor IF strip and time-switching multiplex circuit are all factory-assembled. Stereo indicator light. Front-panel tape output. Sensitivity: 1.8 µV. Harmonic Distortion: 0.8% at 100% modulation. Response, 50-15,000 Hz. 5¼x15½x13¼". Takes optional case below. For operation from 110-120 volts. 60 Hz AC.

13 A 2035 U. Shpg. wt., 13 lbs. 149.95
13 A 2040 X. Oiled Walnut Wood Case. For Models LK-60B and LT-112B-1. Shpg. wt., 6 lbs. 20.82

e page 438 for full Credit details

EICO

STEREO HI-FI KITS

Eico's best receiver! Features, and performance usually reserved for highest priced receiver kits . . and it's easy to assemble!

All-silicon solid-state 80-watt Stereo FM-AM Receiver Kit

Kit form

189^{95}

$10 monthly*

Assembled

279^{95}

$14 monthly*

FM 88 90 92 94 96 98 100 102 104 106 108
AM 55 60 65 70 80 90 100 120 140 160
EICO
cortina
INPUT SELECTOR
TAPE MON
AFC
LOUDNESS
VOLUME
BALANCE
MODE
BASS
TREBLE
HI FILT
LO FILT
POWER
SPEAKERS

High and low frequency filters

Time-switching FM multiplex circuit

Five tuned circuits in FM front end

Switchable AFC control on FM

Speaker selector for use in multi-speaker systems

- **All silicon transistor circuit provides superb performance**
- **Four double-tuned IF stages for excellent FM selectivity**
- **Factory assembled front end, IF strip, multiplex circuit**

Model 3770. Eico's finest solid-state stereo receiver gives you many fi
features usually not found in receiver kits in its price class. All silicon-tra
sistor circuit develops 80 watts of power to drive just about any speak
systems made. Advanced design FM circuit with time-switching multipl
on FM, five tuned circuits in the front end and four double-tuned IF stag
delivers magnificent stereo FM reception. Also offers excellent AM. Pr
assembled front end, factory-aligned IF strip and factory-assembled mul
plex circuit simplify kit assembly and assure top performance without usi
special alignment tools and equipment. Also has precision tuning mete
switchable AFC on FM and stereo indicator light for extra tuning conve
ience and accuracy.

Power Output at 4 Ohms: 80 watts ±1 dB, 70 watts IHF, 20 watts rı
per channel. Deluxe full-feature preamp has controls and facilities for eve
music source. Features tape monitor, loudness contour, mono/stereo mo
switch, rumble and scratch filters, speaker selector switch and stereo hea
phone jack. Response: ±½ dB, 8-60,000 Hz. FM Sensitivity: 2.4 μV IH
Harmonic Distortion: less than 0.75%. Hum and Noise: –70 dB. FM Sep
ration: 40 dB. Inputs: magnetic phono, tape and auxiliary. Outputs: 4-
ohms, tape and stereo headphones. With walnut-finish vinyl-clad met
case. Size, 4½x16x9". For 115 VAC.

13 A 2334 U. Kit Form. Shpg. wt., 15 lbs.............................189.
13 A 2335 U. Factory Assembled...279.

Kit form

169^{95}
$9 monthly*

Assembled

259^{95}
$13 monthly*

Deluxe 80-watt Stereo FM Receiver Kit

Model 3570. Popular silicon-transistor receiver kit featu
factory assembled front end, multiplex circuit, and align
IF strip for easy assembly and top performance witho
using special tools or equipment. Five tuned circuits in t
RF section, time-switching multiplex and four doub
tuned IFs assure outstanding stereo FM reception. Al
has stereo indicator light and tuning meter. Preamp h
tape monitor, loudness contour, mode switch, rumble a
scratch filters, speaker selector, and stereo headpho
jack. Response: ±0.5 dB, 8-60,000 Hz. FM sensitivi
2.4 μV IHF. With walnut-finish vinyl-clad metal ca
Size, 4½x16x9". For 115 VAC.

13 A 2352 U. Kit Form. Shpg. wt., 14 lbs..................169.
13 A 2343 U. Factory Assembled...............................259.

**Buy with low monthly payments . . see page 438 for deta*

Eico "Cortina" silicon solid-state 80-watt Stereo Amplifier Kit

EICO

STEREO HI-FI KITS

Kit form	Assembled
99^{95}	139^{95}
$5 monthly*	$7 monthly*

- Silicon-transistor circuit for outstanding stereo hi-fi
- Preamp has high overload level for full dynamic range
- Transformerless output for response of 5-100,000 Hz

Model 3070. Eico's most popular solid-state stereo amplifier kit offers powerful performance and advanced circuit design at a budget-value price. Premium silicon-transistor transformerless output circuit develops a husky 80 watts of music power to drive two sets of speakers. Preamp has wide dynamic range to prevent clipping distortion due to overloads. Also has scratch and rumble filters, mode switch, loudness contour and speaker selector. Power Output at 4 Ohms: 80 watts ±1 dB, 70 watts IHF, 20 watts rms per channel. Response: ±1½ dB, 5-100,000 Hz. Harmonic Distortion: less than 0.8%. Hum and Noise: −72 dB. Inputs: magnetic phone, tuner, auxiliary. Outputs: 4-16 ohms, extension speakers, headphones, tape monitor. Walnut-finish vinyl-clad metal case. 3¼x12x8". 115 VAC.

13 A 2338 X. Kit Form. Shpg.wt., 8 lbs. 99.95
13 A 2339 X. Factory Assembled 139.95

co's best silicon solid-state reo Amplifier Kit..190 watts

Kit form	Assembled
49^{95}	225^{00}
9 monthly*	$12 monthly*

- Silicon transistors for pure sound and stable operation
- Preamp has array of controls for all music sources
- Tremendous 190-watt output magnificent stereo sound

Model 3150. Eico's finest solid-state stereo amplifier kit has all the features power and quality you'd ever want—and look at the remarkably low price! Boasts silicon transistors in a Complementary Symmetry circuit (no driver or output transformers) which develops a mighty 190 watts of music power. Transformerless output assures wide response, ±1.5 dB, 10-30,000 Hz. Full-feature preamp features tape monitor, scratch and rumble filters, mode switch, speaker selector switch, loudness contour and stereo headphone jack. Power Output at 4 Ohms: 190 watts ±1 dB, 150 watts IHF, 50 watts rms per channel. Harmonic Distortion: 0.1%. Hum and Noise: −75 dB. Two AC convenience outlets, one switched. With walnut-finish vinyl-clad metal case, 3⅛x15x7½". For 115 VAC.

13 A 2254 U. Kit Form. Shpg. wt., 17 lbs. 149.95
13 A 2253 U. Factory Assembled 225.00

ompact solid-state Stereo FM Tuner Kit

lel 3200. One of Eico's most popular kits because it has ay features and performance of more expensive tuner . Has solid-state circuit with silicon transistors. Easy to mble; preassembled front end, multiplex circuit and strip assure optimum performance without the expense trouble of alignment tools and other electronic gear. tures automatic stereo/mono FM switching, tuning er, stereo indicator light and SCA filter. Has two RF es with five tuned circuits and four double-tuned IFs. sitivity: 2.4 μV IHF. Perfect mate for either amplifier ve. With walnut-finish vinyl-clad metal case. Size, x12x8" deep. For 115 VAC.

2340 X. Kit Form. Shpg. wt., 7 lbs. 99.95
2341 X. Factory Assembled 139.95

Kit form	Assembled
99^{95}	139^{95}
$5 monthly*	$7 monthly*

Selected Kits
STEREO SYSTEMS

Latest in easy-to-build Eico and Scott Kit stereo systems at big savings

Eico 80-watt stereo FM-AM-Phono System with deluxe three-way speaker systems

Save $104.85

349^{95}

Separately, $454.80. Superb kit system for the critical h listener. Eico 3770 80-Watt Stereo FM-AM Receiv Kit with metal case. All silicon transistors, five tuned c cuits, four double-tuned IF stages. Garrard SL65B 4-Spe Automatic Turntable with Base. Synchro-lab mot damped cuing and anti-skating. Pickering XV-15/AM Stereo Cartridge with elliptical diamond stylus. Two Alli 3030B assembled 3-way Speaker Systems. 12" woof 6" midrange, 3½" tweeter. Precision-tuned ducted po ¾" wood cabinet in walnut finish. Complete with instru tions, hi-fi booklet, and connecting cables.
13 A 0970 D5U. Shpg. wt., 82 lbs. 349

ALTERNATE FM-PHONO SYSTEM

Separately, $404.80. As above, but with Eico 3570 FM-o Receiver Kit; 2 Allied 3017 3-way 10" Speaker Systems
13 A 0969 D5U. Shpg. wt., 73 lbs. 299

Eico 190-watt Stereo Phono System

Save $85.30

319^{50}

Separately, $404.80. First-rate performance at a low price. Eico 3150 190-watt Stereo Amplifier Kit with metal Case. Boasts silicon transistors in a Complementary Symmetry circuit. Garrard SL65B 4-speed Automatic Turntable with Base. Synchro-lab motor, stylus pressure gauge and adjustable counterweight. Empire 888E Stereo Magnetic Cartridge with elliptical diamond stylus. Two Allied 3030B assembled 3-way Speaker Systems, with 12" woofer, 6" midrange, 3½" tweeter. Cabinet has cane grille cloth, walnut finish. With instructions, cables, hi-fi booklet.
13 A 0971 D5U. Shpg. wt., 91 lbs. 319.50

ALTERNATE 80-WATT SYSTEM

Separately, $324.80. Above, with Eico 3070 80-watt Amplifier Kit; 2 Allied 3017 3-way 10" Speaker Systems.
13 A 0972 D5U. Shpg. wt., 67 lbs. 249.95

Scott 160-watt Stereo Phono System

Save $86.80

359^{00} less case

Separately, $445.80. Exceptional power and performance are yours to command with this fine system. Scott LK-60B 160-watt Stereo Amplifier Kit. Takes optional case below. Silicon transistor transformerles output stage. Garrard SL72B Automatic Turntable with Base. Synchro-Lab motor, low-mass tubular aluminum pickup arm. Shure M93E Stereo Cartridge with elliptical diamond stylus. Two Allied 2330B assembled 3-way Speaker Systems. 12" woofer, 8" midrange, 3½" tweeter. With instructions, cables, hi-fi booklet.
13 A 0973 D5U. Shpg. wt., 106 lbs. 359.00
13 A 2040 X. Wood Amplifier Case. Wt., 6 lbs. 20.8

ALTERNATE SCOTT KIT SYSTEM

Separately, $385.80. Same stereo system as above, but with two Allied 3017 3-way 10" Speaker Systems.
13 A 0974 D5U. Shpg. wt., 81 lbs. 319.00

See Eico Kits on pages 472 and 473; Scott Amplifier, page 4

See your favorite music displayed in thrilling color!

EICO KITS

COLOR ORGANS

Four-color operation for spectacular light display

Giant 30x15″ shatterproof screen

Kit form

49^{95}

-channel Color Organ

del 3440. Watch reds, blues
d greens dance to your fa-
ite beat. Color and intensity
inge with frequency and vol-
e of music. Connects in sec-
ds to speaker leads of any
fi or guitar amplifier. Volume
itrol assures full performance
h any power input level. Has
effect on sound quality.
lid-state circuit—not me-
nical. Shatterproof 9x14″
een. Walnut grain wood
e. 10x15x6″. For 115 V, 60
AC. Wt., 12 lbs.
A 2255 U. Kit..........49.95
A 2256 U. Assembled...79.95

Kit form

64^{95}

4-channel Color Organ

Model 3445. Add true synchronization of color and sound, plus 4-channel operating capability to your hi-fi or guitar amp for spectacular color effects. Solid-state color organ responds to amp output to change light color and brightness as the frequency and volume of the music varies. Built-in volume control lets you adjust for varying input power levels. Uses low-voltage high-intensity lamps. 24x12″ screen. Walnut case. 24x12x10″. Wt., 18 lbs.

13 A 2248 U. Kit..........64.95
13 A 2249 U. Assembled...99.95

Kit form

79^{95}

Giant 4-channel Color Organ

Model 3450. For the armchair audiophile or professional musician. See every tone, every note, every combination of instrument create its own vivid pattern. All-electronic 4-channel operation and giant 30x15″ shatterproof plastic screen. Unit can be connected directly to hi-fi, tape recorder, or guitar amp without loss in sound quality or volume. Connects in seconds. Solid-state circuitry throughout. Walnut case, 30x15x11″. Shpg. wt., 22 lbs.

13 A 2262 U. Kit............................79.95
13 A 2263 U. Assembled....................109.95

39^{95} Kit

obe with automatic control

lel 3475. Newest sensation in
io lighting effects. Strobe flashes
rhythm to music, adjusts rate
omatically. Sensitivity control
mits use with low volume levels.
inects to any audio line. Teak
yl clad metal case, 6¼x9⅜x5⅜″.
h spun aluminum reflector, plug-
enon bulb. Wt., 3 lbs.
2271. Kit....................39.95
2300. Wired..................59.95
2272. Model 3470. Similar to
ve, but manual flash rate adjust-
it. Wt., 3 lbs. Kit.............24.95
2301. Wired..................39.95

49^{95} Kit

Sound/Color Translator

Model 3465. Solid-state three-channel sound/color translator converts your music system into three primary frequencies. Hook up any arrangement of colored lights up to 1200 watts (400 watts per channel). Handsome teak vinyl-clad metal cabinet, 6¼x9⅜x5⅜″. Shpg. wt., 7 lbs.

13 A 2295. Kit.................49.95
13 A 2302. Wired..............69.95
13 A 2296. Model 3460. Similar to above, but single channel, lights up to 500 watts. Wt., 3 lbs.......24.95
13 A 2303. Wired..............39.95

Display/Receiver

29^{95} Kit

Keeps rhythm with music or lights randomly

Light display/receiver can be used with Model 3460 translator at left to flash in rhythm to music, or used by itself for random display of flashing lights. Just lower the house lights and turn it on to produce an interesting and unusual lighting effect in any room in your house. Walnut cabinet, 24x12x10″. 115 VAC. Shpg. wt., 8 lbs.

13 A 2297 X. Kit..........................29.95

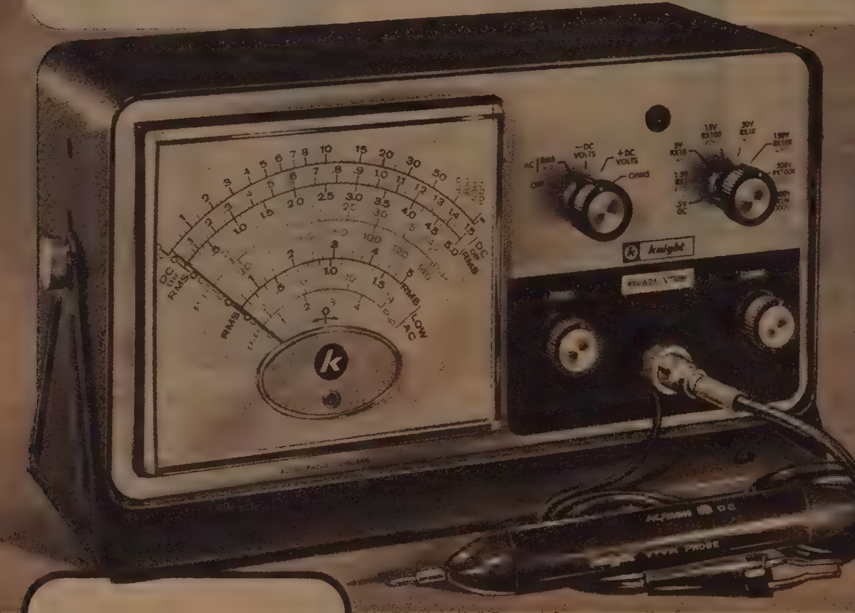
ve money and have fun building your own color organ

knight-kit
TEST
EQUIPMENT

Knight-Kit's finest VTVM Kit .. 6" scale plus ½-volt DC range for accurate transistor servicing

Single, switchable AC-ohms/DC probe permits quick, easy multiple measurements . . precision 1% resistors are used as multipliers for outstanding accuracy . . big 6" meter has 10 color-correlated scales and fluorescent knife-edge pointer for effortless readings

39.95
$5 monthly
see page 438



Acclaimed by the experts!

". . . the extras. Wh the basic circuits c common to all servi grade VTVM's, it's t refinements, particul ly in the DC circ that makes the KG-6 a strong contender f a position on your t bench . . ."

RAD
ELECTRONI

- ✓ AC frequency response is useable to 5 MHz
- ✓ Pre-aged bridge tube with matched triode sections
- ✓ Provides direct readings of AC volts (both p-p and rms)
- ✓ Zero-center scale for discriminator alignment
- ✓ Separately calibrated scales for 1.5 and 5 V AC rms
- ✓ Separately calibrated scales for 4.2 and 14 V AC p-p
- ✓ 11-megohm DC input resistance for minimum circuit loading
- ✓ Gimbal-type mounting bracket for test bench versatility

Knight-Kit KG-625. Deluxe VTVM kit with all the convenience and featu necessary for proper servicing of electronic equipment. Features ½-volt f scale DC range for accurate transistor work; single, switchable AC-ohms/I test probe for quick, easy multiple measurements; well-designed layout w inverted chassis for simplified assembly.

Has push-pull balanced bridge circuit for maximum accuracy and meter p tection. Premium, pre-aged bridge tube with matched triode section assu stable calibration adjustments. 6" meter with sensitive 200-μA moveme Fluorescent knife-edge pointer eliminates parallax. 10 color-correlated sca Also has: DC polarity reversing switch; zero-center scale for discrimina alignment; pilot light; low-leakage switches; special power transformer line isolation. 11-megohm DC input resistance.

Calibration controls at back of panel. 7¾x12x5½". With gimbal mount bracket, AC-ohms/DC probe, battery. 115 VAC. Optional probes bel
22 A 3975 X. Japan. Shpg. wt., 9 lbs. . . . . .39.
22 A 3130 X. Assembled High-Voltage Probe. To 25,000 V. Wt., 1 lb. . . . .6.
22 A 3131 X. Assembled High-Frequency Probe. To 250 MHz. Wt., 1 lb. . . .6

SPECIFICATIONS

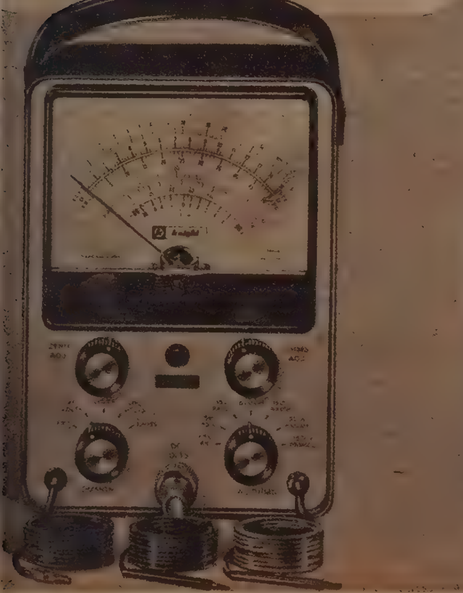
DC Section. *Ranges:* 0-0.5-1.5-5-15-50-150-500-1500 volts full scale. W optional HV probe to 25,000 V. *Accuracy:* ±3% of full scale. *Input Resista* 11 meg (1 meg in probe) to 1500 V. **AC Section.** *Ranges* (rms): 0-1.5-5-15- 150-500-1500 volts full scale. (*p-p*): 0-4.2-14-42-140-420-1400-4200 volts f scale. *Accuracy:* ±5% of full scale. *Response:* ±1 dB, 30 Hz to 3 MHz; dB, 30 Hz to 5 MHz. With optional RF probe to 250 MHz. **Ohmme** *Ranges:* 0-1000-10K-100K ohms, 0-1-10-100-1000 megs. *Battery;* 1½-v size "C." **Tube Complement.** *Meter Bridge:* 12AU7A. *Full-Wave Rectif* 6AL5. *Power Supply:* transformer, silicon diode rectifier.

Knight-Kits are available on Credit Terms—see page 43

Low-cost 4½" VTVM Kit . . there's no better value in a general-purpose tester

29^{95} $5 monthly

see page 438



ht-Kit KG-620. Outstanding value for any service shop, bench, or hobby corner. Provides entirely electronic, ct-reading measurements of AC volts (both p-p and), DC volts, resistance and decibels on a highly legible, -color 4½" meter scale.

push-pull balanced bridge circuit; DC polarity re- ing switch; 11-megohm DC input resistance. Uses ision 1% resistors for high accuracy. 200-μA meter ement; direct-reading decibel scale; 1.5-volt full scale range. Single zero-adjust control for all ranges and tions. Zero-center scale for discriminator alignment. ial power transformer for line isolation.

l case, 7⅝x5⅜x4¼". With three test leads, battery, ructions. Optional probes below. 115 VAC. Japan.

.3911 X. Shpg. wt., 7 lbs. **29.95**

3130 X. Assembled HV Probe. To 25,000 V. 1 lb. . . . **6.95**

3131 X. Assembled RF Probe. To 250 MHz. 1 lb. . . . **6.95**

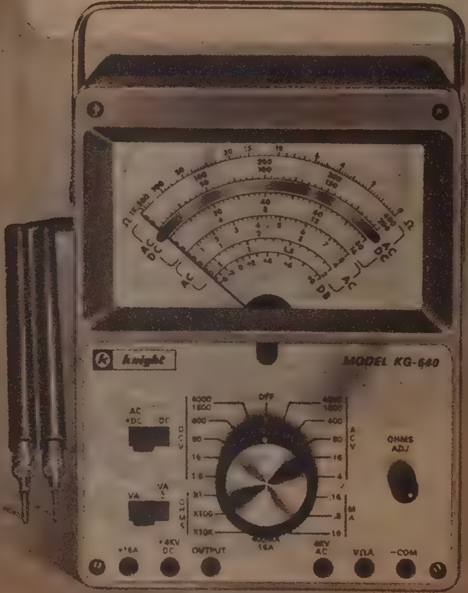
SPECIFICATIONS

ges: *DC Volts:* 0-1.5-5-15-50-150-500-1500 (with op- al HV probe to 25,000 V). *Accuracy:* ±3%. *AC Volts*): 0-1.5-5-15-50-150-500-1500. *(p-p):* 0-4.2-14-42-140- 1400-4200. *Accuracy,* ±5%. *Resistance:* 0-1000-10K- K ohms, 0-1-10-100-1000 megs. *Center Scales:* 10, 100, 0, 10K, 100K ohms, 1 and 10 megs. *Decibels:* −10 to in 7 ranges. *AC Response:* ±1 dB, 30 Hz to 3 MHz; dB, 30 Hz to 5 MHz (to 250 MHz with optional RF e): **Tube Complement:** *Bridge,* 12AU7A; *Rectifier,* 6AL5.

Our finest VOM Kit has 57 total ranges plus taut-band meter movement

39^{95} $5 monthly

see page 438



Knight-Kit KG-640. This 20,000 ohms/volt VOM kit offers exacting performance and dependability required by technicians, servicemen and serious experimenters. Accurately measures AC, DC and output volts, current, ohms and dB. 0.8 VDC range for precise transistor work.

Sensitive, diode-protected 50-μA taut-band meter movement assures repeatability of readings; 57 total ranges covered by a single range/function switch and range doubler. Easy-to-read 4½" meter with mirrored scale. AC response extends to beyond 200 kHz for precise AC measurements. Has DC polarity reversing switch, ohms adjust. Uses 1% precision carbon film resistors as multipliers.

DC sensitivity: 20,000 ohms/volt or 10,000 ohms/volt (function of scale multiplier switch). Metal case, 6¾x5¼x 3¾". With one "C" battery, 4 penlight batteries, test leads, step-by-step instructions. From Japan.

22 A 3954 X. Shpg. wt., 5 lbs. **39.95**

SPECIFICATIONS

Ranges: *AC Volts:* 0-2-4-8-16-40-80-200-400-800-1600-2000-4000. *DC Volts:* 0-.8-1.6-8-16-40-80-200-400-800-1600-2000-4000. *Output Volts:* 0-2-4-8-16-40-80-200-400. *Resistance:* 0-1000-10K ohms, 0-10 megs. *DC Current:* 0-80-160-400-800 μA., 8-16-200-400 mA, 8-16 Amps. *Decibels:* −12 to +74 on 12 ranges. *Accuracy:* DC, ±3% of full scale reading; AC, ±5% of full scale reading (to 1600 V). *AC Frequency Response:* 200 Hz to beyond 200 kHz. *Test Leads:* 48" long, one red, one black.

knight-kit
TEST
EQUIPMENT

knight
VOLTOHMETER

Low-cost full-size VOM Kit with easy-reading 4½" scale . . fine value for the hobbyist

16^95

Knight-Kit KG-645A. This 5000 ohms/volt VOM kit
priced right, sized right for the hobbyists' and exper
menters' workbench. Boasts full meter movement prote
tion on all voltage, current and decibel ranges. Precisio
1% resistors are used as multipliers for high accuracy. Has
total measuring ranges.

Provides accurate measurements of AC, DC and outp
volts, AC and DC current, resistance and decibels. Easy-t
read 4½" two-color meter has 8 clearly calibrated scale
Helps you to quickly evaluate condition of radios, TV
appliances, audio equipment and other electronic device

Has ohms/zero adjust; range and function switche
Specially designed for easy, simplified assembly—takes on
a few hours. Rugged case, 6¾x5¼x2¾". With batter
test leads, carrying strap, instruction manual with i
formative "How to Use" section. From Japan.
22 A 3914 X. Shpg. wt., 3 lbs. . . . . 16.

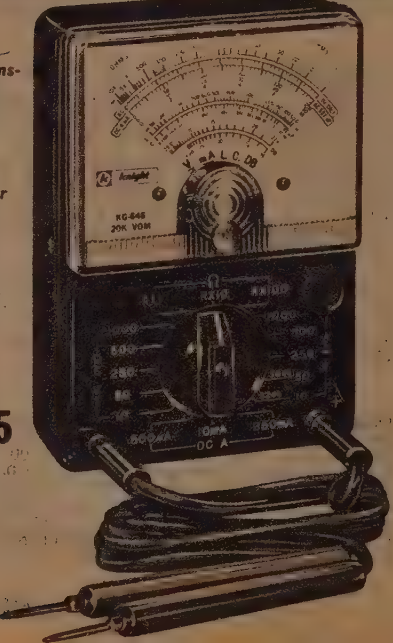
SPECIFICATIONS

Ranges. AC, DC and Output Volts (7 Ranges Each): 0-1-
10-50-100-500-5000. *Resistance (3 Ranges):* 0-5000-50
500K ohms. *Center Scales:* 50, 500 and 5000 ohms. *AC, D*
Current (4 Ranges Each): 0-1-10-100 mA, 0-1 A. *Decibe*
−20 to +76 in 6 ranges. *AC and DC Sensitivity:* 5000 ohm
volt. *Accuracy:* AC, 4% of value; DC, 3% of value; oh
3% full scale. *Meter Movement Sensitivity:* 80 μA for fu
scale deflection. *Battery:* 1½-V size "C". *Test Lea*
Supplied: 48" long, one red, one black.

20,000 ohms-per-volt DC sensitivity

Protected 40-μA meter movement

Recessed range/function switch



11^95

Pocket-sized VOM Kit . . full 20,000 ohms/volt

Knight-Kit KG-646. Here's a pocket VOM kit with ma
full-size VOM features. Ideal for signal tracing, alignme
voltage, current and resistance measurements in all typ
of electronic devices. Easy-to-read two color scale with r
knife-edge pointer. Sensitive 40-μA meter movement wi
diode and ceramic capacitor protection. Recessed rang
function switch for convenient operation. Reads AC, D
volts; DC current; resistance; decibels; L(Self-Inductance
and C (Static Capacitance). Precision circuit design f
excellent operating stability. Top-quality shunts a
multipliers provide ±2% full scale accuracy. 5x3½x1
With 1.5-volt penlight battery, test leads, detailed step-
step instructions for easy assembly. From Japan.
22 A 3907 X. Shpg. wt., 1 lb. . . . . 11.

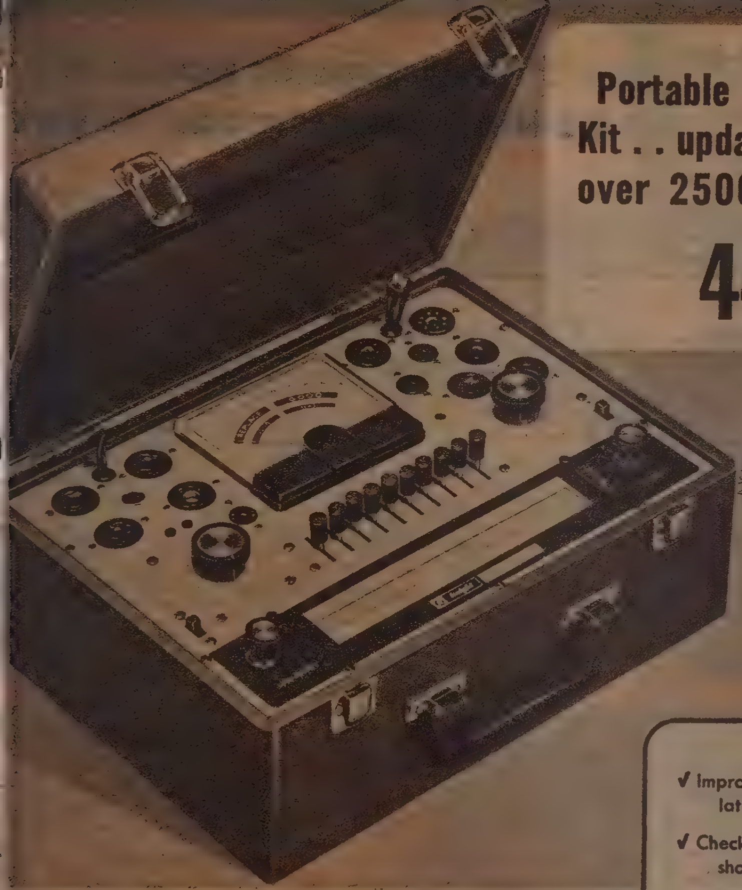
SPECIFICATIONS

Ranges. DC Volts: 0-2.5-10-50-250-1000. *AC Volts:* 0-
50-250-500-1000. *DC mA:* 0-.05-25-250. *Resistance:* 0-10
100K ohms, 0-1 meg. *Decibels (2 Scales):* −20 to +20; +
to +36. *L(Self-Inductance):* 0-5 kH. *C(Static Capacitanc*
0.02 μF to 250 pF. *DC Sensitivity:* 20,000 ohms/volt.
Sensitivity: 10,000 ohms/volt. *Accuracy:* AC, DC, ±
full scale. *Meter Sensitivity:* 40 μA for full scale deflecti
Internal Resistance: 2200 ohms (±5%). *Meter Protecti*
Circuit: diode, capacitor.

Knight-Kits include solder and wi

Portable Tube Tester Kit . . updated to check over 2500 tube types

44.95
$5 monthly
see page 438



Lightweight and portable . . great for use in home or service shop . . newest features at lowest cost

ht-Kit KG-600C. Improved version of our popular KG-600B emission-type tester kit updated to meet today's complex radio and TV servicing ds. Accurately checks over 2500 tube types, plus many CRT's (with onal harness below), and pilot lights to 117 V. Features illuminated roll-t for fast, easy setup; easy-action universal-type selector switches; -to-read 3-color 4½″ meter; sixteen different switch-selected filament ages from 0.63 to 117 volts.

roughly checks 2, 4, 5, 6 and 7-pin tube types; octals; loctals; 7, 9, and in miniatures; 9-pin magnovals; 9-pin novars; 10-pin decals; 12-pin pactrons; pilot lamps. Has GOOD-REPLACE emission scale; GOOD-) gas test scale; 0-100 numerical scale. Neon indicator shows filament inuity and leakage or shorts between tube elements. Special power stat compensates for variations in line or load voltages.

ninated roll chart has smooth thumbwheel drive for fast location of er tube data. Gray fabrikoid-covered portable case, 6½x14½x10½″, ning cover. CRT harness, adapters below. 115 VAC. Japan.

3212 X. Shpg. wt., 13 lbs. 44.95
3141 X. TV Picture Tube Harness. Black-and-white 90° tubes. 8 oz. . . . 4.50
3271 X. 110° Adapters. With harness above, for 110° tubes. 3 oz. 4.50

SPECIFICATIONS

e of Tester: cathode conductance (emission). *Tube Condition Indicator:* lor 4½″ meter with GOOD-REPLACE emission scale; GOOD-BAD gas scale; 0-100 numerical scale. *Individual Element Tests:* shorts, opens and inuity indicated by neon lamp. *Filament Voltages Available:* 0.63, 1.4, 2.5, 3.0, 4.2, 5.0, 6.3, 7.5, 12.6, 19.6, 25, 32, 50, 70, and 117 volts. *Line Load Voltage Adjustments:* power rheostat located in primary of power sformer compensates for voltage variations. *Individual Tube Settings:* from illuminated, gear-driven roll chart with thumbwheel drive. *r Required:* 110-130 V, 50-60 Hz AC.

- ✓ Improved version tests the latest types of tubes
- ✓ Checks emission, continuity, shorts, open elements
- ✓ Positive-action selector switches for easy setups
- ✓ 16 switch-selected filament voltages from 0.63-117 V
- ✓ Illuminated roll-chart with thumbwheel drive finds tube-types fast
- ✓ Full-view 4½″ meter has GOOD-REPLACE, GOOD-BAD, 0-100 scales
- ✓ Tests most TV picture tubes with optional adapter

Replacement Tube Data Roll Charts

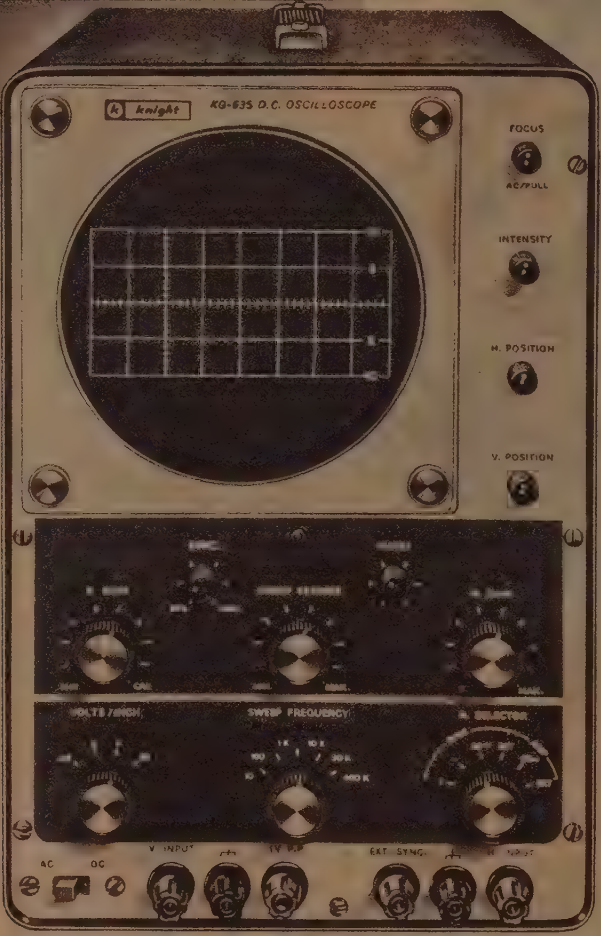
Updated replacement roll charts for all 600 series tube checkers purchased prior to Aug. 1, 1969 are available singly or on subscription basis with a chart plus two supplements per year. Prices: $3.50 per chart; $5.00 for chart plus supplements. Write to: COLECTRONICS Tube Data Service, 1744 Rockaway Ave., Hewlett L. I., New York 11557.

knight-kit
TEST
EQUIPMENT

5" Oscilloscope Kit with DC to 5.2 MHz response for color TV work

119^{95} $6 monthly
see page 438

Get five linear Time Base Ranges even at this low price, not the usual three or four



Knight-Kit KG-635. Wideband DC coupled sco
for nearly every service requirement . . easi
meets the critical demands of color TV servicin
Excellent linearity and lock-in characteristi
assure stable waveform presentations even
upper frequency limits. Dynamic sync limiter f
trace stability; auto astigmatism correction f
uniform focus; 1650-volt accelerating potenti
for really bright traces.

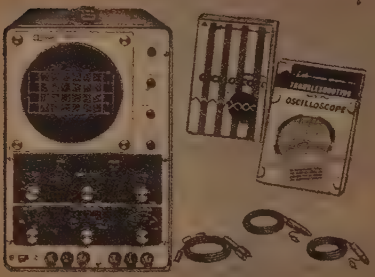
Five linear time base ranges from 10 Hz to 4
kHz. Series/shunt peaking and DC coupling f
optimum wideband response and low phase shi
High vertical sensitivity permits accurate transi
tor work. Vertical attenuator is marked direct
in volts/inch. Graticule scale has X and
linear grids for easy voltage measurement
Regulated power supply; tapped primary tran
former; front panel voltage calibrator outpu
easily accessible calibration controls.

Retrace blanking; push-pull on-off focus contro
5-way binding posts, ¾" spacing. Metal cas
11⅞x7⅞x15⅞". Probes below. For 110-130
50-60 Hz AC. Japan.
22 A 3979 Z. Shpg. wt., 29 lbs. . . . . .119.
22 A 3152 X. Direct Test Leads. 1 lb. . . . . .1.
22 A 3150 X. 12-pF Low-Capacity Probe. 8 oz. 6.
22 A 3151 X. 250-MHz Demod. Probe. 8 oz. . . .6.

SPECIFICATIONS

Vertical. *Sensitivity:* 17 mV rms/inch (7 m
rms/cm). *Response:* ±1.5 dB, DC to 5.2 MH
Color Bandpass: ±0.5 dB. *Overshoot:* less tha
6%. *Rise Time:* 70 nsec. *Impedance:* 3 me
shunted by 35 pF. **Horizontal:** *Sensitivity:* 0.6
rms/inch. *Response:* ±1.5 dB, 1 Hz to 400 kH
Inputs: internal time base, 60 Hz phase co
trolled, external. *Time Base Ranges:* 10-100 H
100-1000 Hz, 1-10 kHz, 10-90 kHz, 90-400 kH
Impedance: 7 meg shunted by 25 pF. *Syn*
internal + and −, 60 Hz, ext. *Z-Axis Input:* 10
neg. for beam cutoff. *Impedance:* 1 meg. *Ca*
brator: 100 mV p-p, ±5% 60 Hz Sine. *Tube*
9, 5" flat-face CRT, 2 rectifiers.

Oscilloscope Kit plus most-wanted Accessories



Save
$12.30

129^{95}
$7 monthly
see page 438

Separately, $142.25. Full scope outfit for speed
profitable servicing. Consists of Knight-Kit K
635 Oscilloscope Kit; Direct Test Leads wi
Clip, Insulator and Double Plug: 12-pF Lo
Capacity Probe; 250-MHz Demodulator Prob
Two Howard W. Sams Books: "Know Yo
Oscilloscope" and "Troubleshooting with T
Oscilloscope." Leads and probes are fu
assembled. Books are clearly written in no
technical language—provide you with help
instructions on servicing, adjustments, troub
shooting and calibration, plus explanations
theory and operation of oscilloscopes. Scope
includes step-by-step assembly instructions.
22 A 0079 L2Z. Shpg. wt., 30 lbs. . . . . .129.

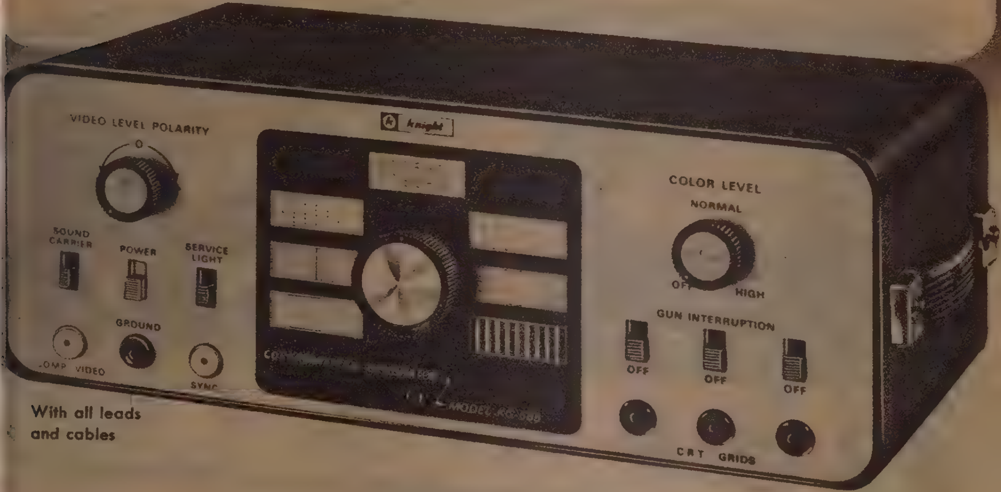
SHIPPING NOTE: Items with suffix U, W or Z in stock no. s
truck or express. See Ordering Information pag

Color Bar/Pattern Generator Kit with silicon transistors .. Tops for in-home or in-shop color TV servicing

Three super-stable crystal-controlled oscillators give you seven rock-steady patterns . . Permit precision convergence, tracking and purity adjustments for movie-clear color TV . . You also get fast, simplified setup with no need for any synchronization with TV set under test

79.95 $5 monthly
see page 438

Was $89.95 in Cat. 280



With all leads and cables

ight-Kit KG-685. Portable, self-contained color bar/pattern generator provides all patterns needed for fast, accurate convergence and color justments . . it's the ideal choice for on-the-bench and in-the-home lor TV servicing. Advanced solid-state circuit uses 22 transistors (19 icon types including Unijunction counters) plus 8 diodes for long-term pendability and operating efficiency.

nerates stable, crystal-controlled displays: 10 color bar signals; purity, acking and crosshatch patterns; dots; vertical and horizontal lines. ightness keyed color bars. Tracking pattern with 6-position gray scale. rizontal display elements one raster line thick. Crystal-control minates need for synchronization with test set.

sulation-piercing clips on gun interrupters for safe, positive conctions. Shaded hi-intensity light source with clip mount. Highly polled service mirror stores under case. Roomy storage compartment for cables. Special power transformer eliminates magnetic effects on color RT. 4⅝x9⅝x12". With all cables, instructions. 115 VAC.
A 3989 X. Shpg. wt., 14 lbs. 79.95

SPECIFICATIONS

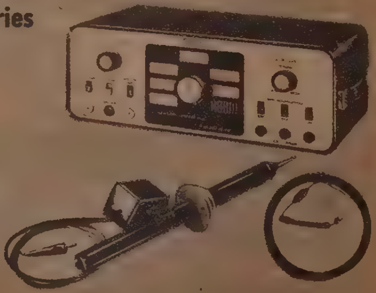
RF Output: 10,000 μV minimum, tunable to channels 3, 4, and 5. *Composite Video Output:* ±2 volts peak-to-peak. *Composite Sync Output:* −2 volts (for Zenith color sets). *Crystal-Controlled Oscillators:* Master, 179 kHz; Color, 3.56 MHz; Sound Subcarrier, 3.56 MHz. *Front Panel Controls and Jacks:* Display Selector; Sound Carrier On-Off; Gun-Interruption On-Off; Power On-Off; Service Light On-Off; Color Level Control; Video Level/Polarity; 6 Pin Jacks (3 signal output, 3 CRT grids). *Rear Panel Controls:* Channel Tuning; Vertical Intensity; Timing; 6-circuit Test Jack. *Cables:* RF Output; Gun Interrupter; Service Light; Composite Video and Sync. *Fuse:* Internal, ¼-A quick blow.

olor Bar/Pattern Generator Kit with valuable Accessories

parately, $110.73. Complete outfit for fast, curate color TV servicing. Consists of Knightit KG-685 Solid-State Color Bar/Pattern enerator Kit; B&K Model HV-30 High Voltage RT Probe; Color TV Degaussing Coil. Highltage probe has built-in meter, reads 0-30,000 DC. Permits direct HV readings of color TV RT's. Has triple-insulated probe, 50-μA meter, ft-lined carrying case. Needs no batteries, or her power. Accuracy, ±2% at 25,000 volts; 3% of full scale. 14½" long. Degaussing coil removes unwanted green patches on screen, clears picture. 7" diameter. Pushbutton on-off itch. Instructions. For 115 VAC.
A 0069 L3X. Shpg. wt., 18 lbs. 105.00

Save $5.73

105.00
$6 monthly
see page 438



ight-Kits are a product of Allied Radio

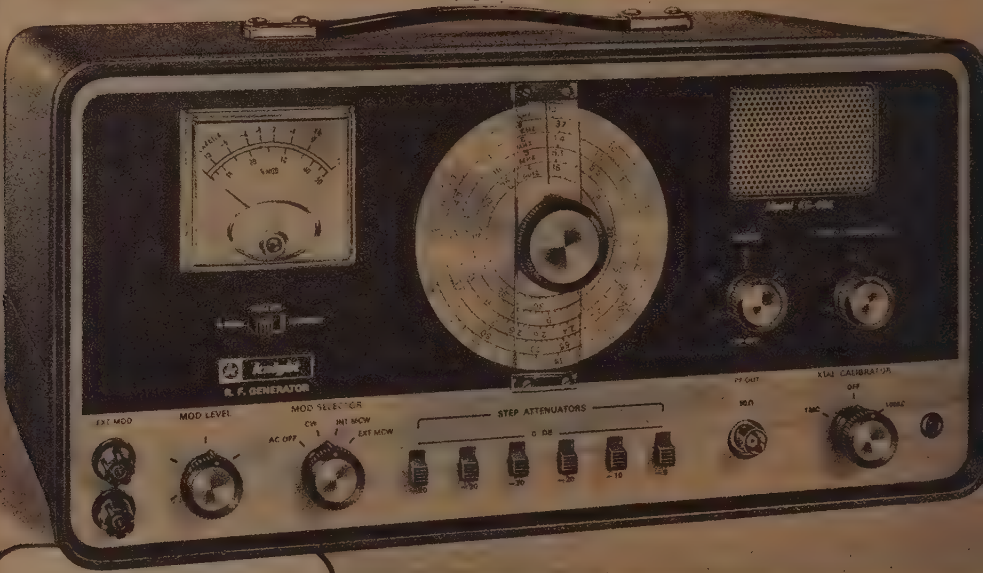
knight-kit
TEST EQUIPMENT

"An honest-to-goodness calibrated-output RF signal generator for under $300? Yep, less than $100. It's Allied Radio's KG-686."
ELECTRONICS ILLUSTRATED

Solid-state lab RF Signal Generator Kit with precision calibrated output

79.95
$5 monthly
see page 438

100 kHz to 54 MHz in five fundamental bands . . includes all TV IF frequencies . . frequency accuracy is usable to ±0.1% with built-in Crystal Calibrator



Easy-to-read metal Dial with 6:1 vernier drive and anti-backlash for easy frequency selection

XTAL CALIBRATOR
OFF
1 MC
100KC

Built-in 100 kHz/ 1 MHz Crystal-Calibrator for frequency accuracy usable to ±0.1%

Switchable 200-μA D'Arsonval Meter shows accurate RF carrier or modulation level

Knight-Kit KG-686. Offers the precision control needed for exact design wo
and critical troubleshooting. *All-silicon transistor* circuit for outstandi
stability . . built-in 100 kHz/1 MHz crystal calibrator for frequency a
curacy comparable to units costing much more. Covers 100 kHz to 54 M
in five fundamental bands (includes all television IF frequencies). Frequen
accuracy is ±1.5% on any band, usable to ±0.1% with calibrator.

Has floating-type oscillator for complete isolation from chassis; tunable
and C on every band; bridged "T", low-distortion two-stage modulati
oscillator. Six individually shielded step attenuator switches offer 21 discre
levels for precise attenuation to −96 dB. Fine attenuator control covers −
to +2 dB. Detector-amplifier-speaker system provides audible "zero" bea
from crystal calibrator. Clearly calibrated, two-color 4" metal dial with 6
vernier drive and antibacklash for effortless and precise frequency selecti
and resettability.

Well-designed chassis and generous copper shielding assure minimum r
diated leakage. Fully regulated power supply for excellent output stabili
Output is 120,000 μV max., calibrated into 50-ohm load. Point-to-poi
wiring. Detachable 2-wire line cord. Steel case, 10¼x14¾x7¾". BNC ou
put jack, mated terminal cable. For 110-130 V, 60 Hz AC. Japan.
22 A 3993 X. Shpg. wt., 15 lbs. . . . . .79.
22 A 3369 X. Optional 3-Wire Cord. Shpg. wt., 1 lb. . . . . 1.

SPECIFICATIONS

Frequency Coverage (5 Fundamental Bands): A, 100-370 kHz; B, 370-14
kHz; C, 1.4-5.1 MHz; D, 5.1-16 MHz; E, 16-54 MHz. *Frequency Accura*
±1.5%, usable to ±0.1% with calibrator. *Calibrator:* 100 kHz (derived
1 MHz. Accuracy, ±0.05%. Detector-amplifier-speaker system for audi
"zero" beats. *Calibrated Output:* 50-ohm load, 120,000 μV max. *Open Circ*
Uncalibrated Output (min. rms per Band): A, 3 V; B, 2 V; C, 0.6 V; D,
0.3 V. *Attenuation:* six step attenuators; 21 levels to −96 dB. Fine contr
−10 to +2 dB. Outputs to −106 dB (0.5 μV) may be obtained. *Intern*
Modulation: 400 Hz at ±20%. Metered depth to 50(±5)% to 30 MH
External Sensitivity: approximately 1 Vrms for 50% modulation at 400 H

SHIPPING NOTE: Items with suffix U, W or Z in stock no. sent tr
or express. See Ordering Information pag

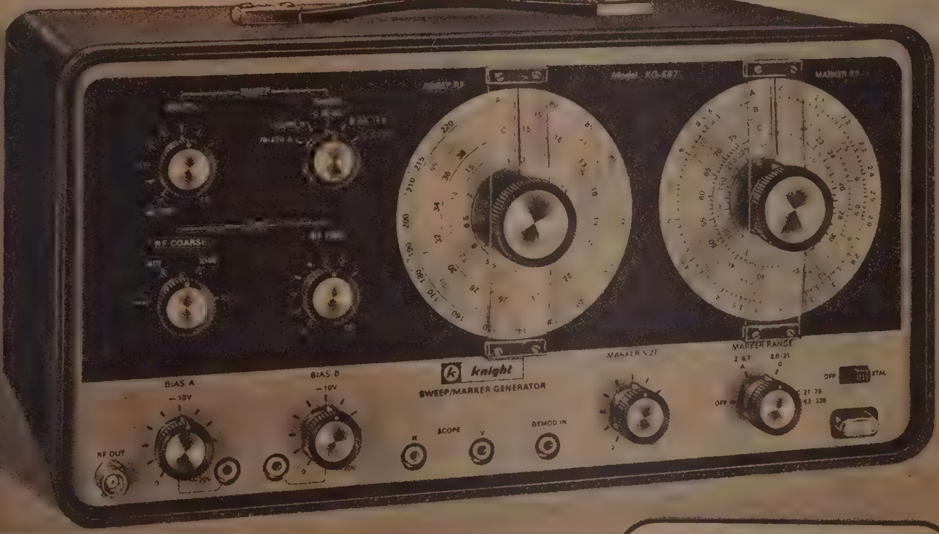
Professional solid-state Sweep/Marker Generator Kit with fixed and variable post-injection markers

> *". . distinctively styled. . . Construction of the kit is simple and straight-forward."*
> ELECTRONICS WORLD

Sweep oscillator, 3-220 MHz . . Marker oscillator, 2-225 MHz . . covers all TV and FM, IF and TV VHF frequencies . . crystal-controlled and post-injected Markers

9995

$5 monthly
see page 438



ght-Kit KG-687. For color, black-and-white TV, FM and stereo FM vicing. Has all-electronic sweep from 1 Hz to as high as 18 MHz at highest ter frequency. Sweep oscillator, 3-220 MHz on five fundamental bands; ker, 2-225 MHz on four bands (three fundamental, one harmonic). *con transistor* circuit. Regulated power supply; dual feedback; 5-band rable reactor; 4-step decade attenuator with level control. RF retrace king; horizontal phase adjustment for scopes (front panel outputs). 4.5 Iz crystal (included) may be mixed with variable marker. On-off switch crystal function. Steel case, 10¼x14¾x7¾". Detachable 2-wire line cord. h 4.5 MHz crystal in HC-6/U holder. 110-130 V, 50-60 Hz AC. Japan.

3994 X. Shpg. wt., 13 lbs. 99.95
3356 X. **5-MHz Crystal.** Fits HC-6/U holder. Wt., 3 oz. 4.95
3357 X. **10.7-MHz Crystal.** Fits HC-6/U holder. Wt., 3 oz. 4.95
3369 X. **Optional 3-Wire Line Cord.** Shpg. wt., 1 lb. 1.98

SPECIFICATIONS

ep Oscillator Output Levels (*rms min.*): 3-50 MHz, 0.3 V; 50-120 MHz, V; 120-220 MHz, 0.05 V. *Amplitude Regulation:* (for sweep widths not xceed 20%) 3-50 MHz, ±.5 dB; 50-220 MHz, ±1 dB. *Impedance:* 75 ns. *Sweep Frequency:* 60 Hz. *Marker Oscillator Variable Frequencies:* (4 *ds*): A, 2-6.7 MHz; B, 6.6-21 MHz; C, 21-75 MHz; D (harmonic), 65-225 z. *Crystal Frequencies:* 4.5 MHz; 500-kHz to 20-MHz may be used.

4" Metal Dials with 6:1 vernier drive and anti-backlash for precise frequency selection

Marker systems may be mixed internally . . on-off switch for Crystal

BIAS B
10V
−20V
−20V

Fully regulated 0 to −20 volt AGC bias supplies for sets under test

Complete Test Generator Kit Outfit

Separately, $179.90. Professionalize your test bench with these lab-quality signal generators. Includes: Knight-Kit KG-686 RF Signal Generator Kit; Knight-Kit KG-687 Sweep/Marker Generator Kit.
22 A 0131 L2U. Shpg. wt., 28 lbs. 169.90

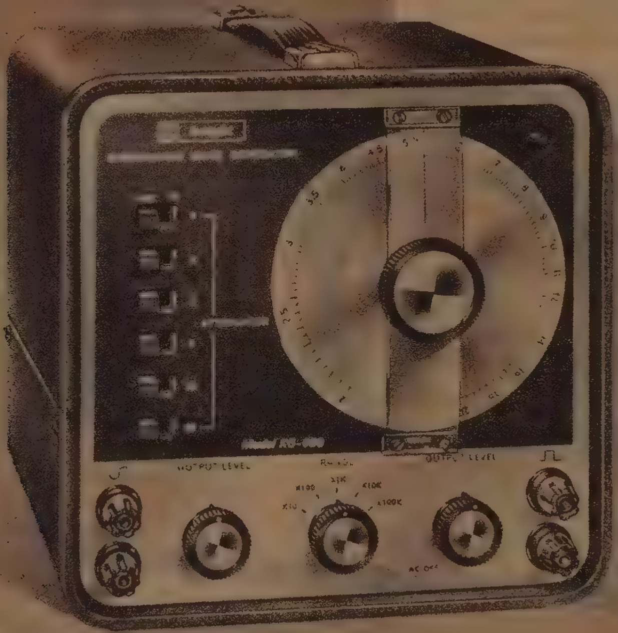
Save $10.00

16990

knight-kit
TEST EQUIPMENT

Sine/square wave Generator Kit with silicon solid-state FET oscillator for laboratory accuracy

59.95 $5 monthly
see page 438



SINE WAVE
20 Hz to 2 MHz in 5 Ranges

SQUARE WAVE
20 Hz to 200 kHz in 4 Ranges

CHECK THESE DELUXE FEATURES

- ✓ *Precise Sulzer Oscillator*
- ✓ *All silicon transistors for super-stability*
- ✓ *Clearly calibrated heavy-gauge aluminum dial*
- ✓ *6:1 planetary-ball, anti-backlash, vernier drive*
- ✓ *Molded hairline cursor for exact selection*
- ✓ *Sine wave frequency range covers entire AM band*
- ✓ *Square wave rise time less than 0.1 µsec at 20 kHz*
- ✓ *Square wave output adjustable from 0 to 10 volts p-p*

Knight-Kit KG-688. Ideal signal source for everything from audio amplifi
to video amplifiers. Sine wave frequency range covers 20 Hz to 2 M
(includes entire AM band). Square wave frequency range covers 20 Hz to 2
kHz. All-silicon transistors for stability and reliability. Precision Sul
oscillator circuit has Field Effect Transistor for outstanding accura
Complementary-symmetry output for low impedance and distortion.

Multiple feedback circuit employs barreter element for constant amplitu
output. Sine wave output voltage is adjustable from 0-7.5 V rms into loa
of 10K ohms or higher. Square wave output voltage is adjustable from 0-
volts p-p into high-impedance loads. Constant-impedance, calibrated st
attenuators provide up to 41 dB attenuation in discrete 1 dB steps. Ea
to-read 4" dial; 6:1 vernier drive.

Ground post at rear of chassis. Positive-lock, 5-way binding posts acce
standard GR plugs. Metal case, 7¾x7⅜x10¼". Two-wire line cord
detachable for easy storage and service. With solder, detailed step-by-st
assembly instructions. For 110-130 V, 50-60 Hz. AC. Japan.

22 A 3995 X. Shpg. wt., 10 lbs. ....59.
22 A 3369 X. Optional 3-Wire Line Cord. Shpg. wt., 1 lb. ....1.

SPECIFICATIONS

SINE WAVE. *Frequency Coverage:* 20 Hz to 2.0 MHz in 5 ranges. X10,
Hz to 200 Hz; X100, 200 Hz to 2 kHz; X1K, 2 kHz to 20 kHz; X10K,
kHz to 200 kHz; X100K, 200 kHz to 2 MHz. *Output Voltage:* adjusta
0-7.5 V rms into 10K ohms or higher, 0-6.5 V rms into 600 ohms. *Sou
Impedance:* 600 ohms nominal using attenuators. *Distortion:* less than 0.25
across entire audio range. *Frequency Accuracy:* ±3% over entire ran
except ±5% below 100 kHz and above 1 MHz.

SQUARE WAVE. *Frequency Coverage:* 20 Hz to 200 kHz in 4 ranges. X10,
Hz to 200 Hz; X100, 200 Hz to 2 kHz; X1K, 2 kHz to 20 kHz; X10K,
kHz to 200 kHz. *Output Voltage:* adjustable 0-10 volts p-p into high-impe
ance loads. *Source Impedance:* 200 ohms nominal. *Rise Time:* less than
µsec at 20 kHz.

General-use RF Signal Generator Kit . . even at this low price you get modulated and unmodulated RF plus 400-Hz for aligning AM-FM radios and TV sets

29^{95} $5 monthly
see page 438

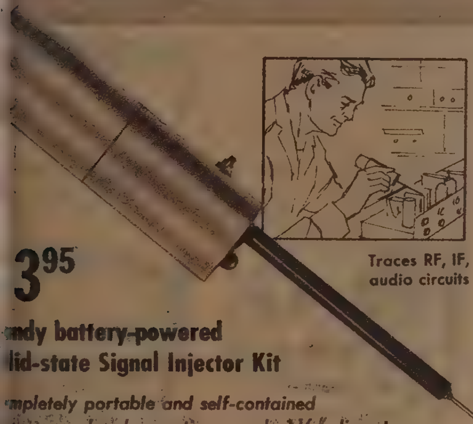
Fundamental output covers 160 kHz to 112 MHz . . calibrated second harmonics usable to 224 MHz . . no alignment needed thanks to factory-calibrated precision-wound coils

ight-Kit KG-650. This thrift-priced signal generator
; has a fundamental output range from 160 kHz to
2 MHz divided into five separate bands. Calibrated
:ond harmonics are usable to 224 MHz. Large,
arly calibrated dial and vernier drive for tuning
curacy. Step and continuous-type attenuators for
act adjustment of output voltage.

itput is available modulated, unmodulated or as 400
: sine wave adjustable to more than 10 volts. Pro-
ion for external modulation. Colpitts oscillator cir-
it and cathode-follower oututs provide maximum
bility. Isolated power supply. Metal case, 7¼x10⅛x
". Detailed assembly and operating instructions.
ith test leads. For 115 VAC.
A 3953 X. Shpg. wt., 8½ lbs. 29.95

SPECIFICATIONS

equency Ranges—Calibrated Fundamentals: Band A,
)-550 kHz; Band B, 550-1850 kHz; Band C, 1850
Iz to 27 MHz; and Band E, 27-112 MHz. *Calibrated*
:ond Harmonics: usable to 224 MHz. *RF Output:* in
:ess of 400,000 microvolts. *Modulation Frequency:*
) Hz. *Audio Output:* adjustable to more than 10 volts
400 Hz. *Attenuator:* 3-position switched, plus con-
uously variable attenuator control. *Tube Comple-*
nt: 6C4, 12AT7; plus selenium rectifier.



3^{95}

Traces RF, IF, audio circuits

ndy battery-powered lid-state Signal Injector Kit

mpletely portable and self-contained
easy one-hand operation . . only 1½" diameter

ght-Kit KG-644. One of the handiest troubleshooters you
: use. This pocket-size servicing aid is a must for anyone
o works on radios, audio amplifiers, TV and other
:tronic devices. Generates a signal rich in harmonics for
cing audio, RF and IF circuits when troubleshooting.
shbutton operation, insulated test probe. Battery condi-
n light. Comfortable-to-hold cylinder-type handle houses
:ire circuit to permit long use without tiring. 9½x1½"
With 4 penlight batteries; complete, easy-to-follow
embly instructions. From Japan.
A 3915 X. Shpg. wt., 8 oz. 3.95

39^{95}
$5 monthly
see page 438

Solid-state Power Inverter/Charger Kit converts 12-volt DC from your car to house current . . also charges batteries

Knight-Kit KG-666. Operate radios, TV sets, tape recorders, other AC appliances in your car, boat, trailer or camper. Converts 12 VDC to 110-130 volts, AC. Also has DC output for universal motor loads. Delivers self-regulating Hi-Lo 6-amp tapering charge to 12-volt batteries. Silicon diode starting network; capacitive and diode despiking network; 2-position output load optimizing switch; pilot light; fuse. Square wave output, 55-65 Hz. Rated 200 watts continuous. Four germanium power transistors. Aluminum case, 4¾x8x8¼". Full instructions.
22 A 3906 X. Shpg. wt., 9 lbs. 39.95

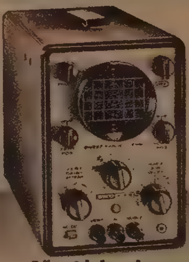
EICO KITS
TEST EQUIPMENT

Popular Test Equipment Kits . . . proven quality at low prices

99^{95} Kit
$5 monthly
see pg. 438

DC to 4.5 MHz 5″ wideband Scope

Model 460-K. Flat response of DC to 4.5 MHz, usable to 10 MHz. Easily reproduces 3.58 MHz color TV sync burst. Vertical sensitivity, 5 mV rms/cm. Input impedance, 3 megs shunted by 35 pF. 4-position attenuator. Full-screen vertical positioning, 2X horizontal positioning. Sweep: 10 Hz to 100 kHz plus low-frequency range. Automatic sync. Edge-lit scale. Metal case, 13x8½x16″. For 105-125 V, 50-60 Hz AC.
21 A 4158 U. Shpg. wt., 25 lbs.........99.95
21 A 4157 U. Model 460. Assembled....149.95



119^{95} Kit
$6 monthly
see pg. 438

3″ wideband portable Scope

Model 435-K. Direct coupled. Push-pull amplifier. DC or p-p AC, 50 mV to 500 V. Response, DC to 4.5 MHz; usable to 10 MHz. Vertical sensitivity, 18 mV rms/cm. Sweep: 10 Hz to 100 kHz; 30 Hz vertical, 7875 Hz horizontal positions. 8½x5¾x12⅝″. 105-125 VAC.
21 A 4282 U. 18 lbs.........119.95
21 A 4335 U. 435 Assembled.169.95

179^{9}
$9 month
see pg. 43

Professional 5″ wideband Scop

Model 465-K. Sensitivity 12 m
rms/cm. Zener diode calibratio
5″CRT; push-pull AC-DC coupl
amplifiers. Response, DC to
MHz; usable to 10 MHz. Swee
10 Hz to 100 kHz, 30 Hz vertic
7875 Hz horizontal positions. 12¾
8½x17½″. 117 VAC.
21 A 4535 U. 27 lbs..........179.
21 A 4536 U. 465. Assembled.249.

Shielded Probes for oscilloscopes

For use with 460-K, 435-K and 465-K. Av. shpg. wt., 5 oz.

Description	Kit Form			Factory Assembled		
	Stock No.	Type	EACH	Stock No.	Type	EAC
Demodulator Probe	21 A 4151	PSD-K	4.50	21 A 4152	PSD	6.9
Direct Probe	21 A 4153	PD-K	3.50	21 A 4154	PD	4.9
Low-Capacity Probe	21 A 4155	PLC-K	4.50	21 A 4156	PLC	6.9

54^{95} $5 monthly
see pg. 438

Audio Generator

Model 379-K. Simultaneous sine and square wave outputs from separate terminals. Sine wave: 20 Hz-2 MHz; 0-7.5 V. Output level varies ±1 dB on 4 lowest bands, ±2 dB on high band. 0.25% max. distortion. Square wave: 20 Hz-200 kHz. 7½x8½x8½″. 117
21 A 4177. 8½ lbs.......54.95
Model 379. Assembled.
21 A 4244. 8½ lbs.......74.95

Color Pattern Generator

Model 385-K. Solid-state. 5 well-defined, crystal-controlled patterns: dots, crosshatch, horizontal and vertical lines, 10 color bars. Feeds directly to antenna terminals. Gun killers can eliminate one or more colors. Portable; requires 6 "C" cells. 2½x8½x8⅜″.
21 A 4537. 7 lbs.........79.95
Model 385. Assembled.
21 A 4538 U. 7 lbs.....109.95

Battery powered

79^{95} Kit $5 monthl
see pg. 43

RF Signal Generator

Model 324-K. 158 kHz to 145 MHz fundamental output (to 435 MHz on harmonics) in 6 bands. Etched dial, ±1.5% accuracy. Internal 400-Hz modulation variable 0-30%; also external sources. Coarse/fine RF attenuators. 8x10x4¾″.
21 A 4141. 10 lbs......32.95
Model 324. Assembled.
21 A 4140. 10 lbs......44.95

Sine/square Generator

Model 377-K. Pure, stable sine wave; 4 bands, 20 Hz to 200 kHz. Wien Bridge oscillator, 1% resistors. Square wave in 4 bands, 60 Hz to 50 kHz. Output, 10 V, 1000 ohms. Hum, under 0.4%. Accuracy, ±3% or 1 Hz. 7⅛x11⅛x7⅝″.
21 A 4135 X. 14 lbs....39.95
Model 377. Assembled.
21 A 4134 X. 14 lbs....54.95

Sweep Marker Generator

Model 369-K. For TV, FM. Features marker adder. 5 sweep ranges, 3 to 220 MHz. 3 marker ranges, 2 to 75 MHz on fundamentals; 60-225 MHz on harmonics. 4.5 MHz crystal. Blanking. 3-stage AGC. Output, 50 ohms. 8½x12½x7″.
21 A 4307 U. 18 lbs....99.95
Model 369. Assembled.
21 A 4308 U. 18 lbs...149.95

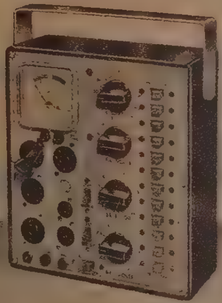
Deluxe Audio Generato

Model 378-K. Low-distorti
sine wave, 1 Hz to 110 kH
Detent switches select
Hz, 10 Hz, 100 Hz, 1 kH
and 10 kHz steps. 8-st
attenuator. Adjustable 0-
V rms output. 4½″ met
Accuracy ±5%. Size, 8½
12½x9″. For 117 VAC.
21 A 4336 X. 16 lbs....59.
Model 378. Assembled.
21 A 4337 X. 16 lbs....79.

Tube and Component Tester Kits
. . easy to build . . priced low

EICO KITS
TEST EQUIPMENT

44.95 Kit
$5 monthly*



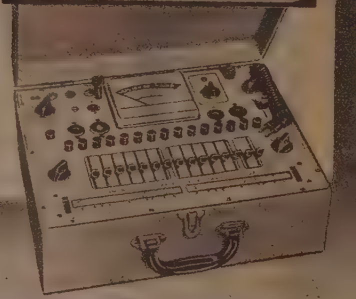
29.95 Kit
$5 monthly*

Deluxe portable Tube Tester

odel 635-K. Versatile tester checks standard tubes for dynamic cath-e emission, shorts, grid leakage d gas. Tests Novars, nuvistors, mpactrons, 10-pin types, battery pes, auto radio hybrids, foreign d industrial tubes. Even handles w decals, magnovals, 7-pin nuvis-s and picture tubes. Burnout-otected 3½" D'Arsonval meter; osphor bronze sockets, pin aighteners. Scuff-proof luggage e case, 4x12½x9". Tube chart. r 110-130V, 50-60 Hz AC.
A 4541. Wt., 5 lbs. 44.95
A 4542. 635-W. Assembled . . 69.95

Tube and Battery Tester

Model 636-K. Tests over 800 radio and TV tubes for cathode emission, shorts, opens, intermittents. Has Go/No-Go continuity test. Sockets for octals, loctals, 7- and 9-pin miniatures, novars, nuvistors, compactrons. Tests, under load, commonly used batteries from 1.5 to 90 volts (11 ranges). 3-color meter; neon lamp short indicator. Transformer isolation power supply. Bakelite case, 8⅝x7½x3⅛", with metal handle. With complete tube data manual. For 117 V, 60 Hz AC.
21 A 4544. Wt., 4 lbs. 29.95
21 A 4238. 636. Assembled 44.95



Dynamic Tube and Transistor Tester

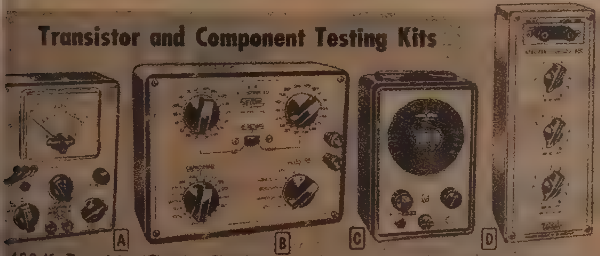
89.95 Kit
$5 monthly*
Tests latest tube types

Model 667-K. Joins mutual conductance (Gm) and plate conductance (Gp) tests into a single dynamic test, plus peak emission test to give a single reading of tube quality. Spots bad transistors by gain and leakage tests.

Checks nuvistors, novars, compactrons, miniatures, subminiatures, octals, loctals, special purpose tubes, VR's, cold cathode regulators. Multi-section transfer switches, 12 six-position-element lever switches.

4½" D'Arsonval meter. Roll chart. Separate plate, screen and grid voltages. 4½x15x12"; latching cover. 115 VAC.
21 A 4143 X. Shpg. wt., 23 lbs. 89.95
21 A 4142 U. 667. Assembled 139.95
21 A 4144. CRU CRT Adapter. 1 lb. 9.95

Transistor and Component Testing Kits



680-K Transistor/Circuit Checker Kit. Measures I_{CBO}, I_{CEO}, DC ta, simulated AC Beta. 0-5-50 C; 0-2000-200K ohms, 0-20 gs; 0-50-500 μA; 0-5-50-500 mA . 3x5¼x6¾". Leads, batteries.
A 4149. Wt., 3 lbs. 34.95
A 4148. 680-W. Assembled. 49.95

1140-K R-C Box Kit. 1350 in-circuit substitutions. Res., 15 ms to 10 meg. Cap., 0.0001 to μF. ±10%. $5\frac{5}{16}$x$6\frac{7}{8}$x$2\frac{5}{16}$".
A 4111. Wt., 3 lbs. 15.95
A 4110. 1140-W. Assembled 24.95

C **955-K Capacitor Tester Kit.** Wien bridge permits in-circuit test (0.1-50 μF) with shunt as low as 35 ohms. ±10%. Short test, to 2000 μF; open test down to 15 pF. 8½x5¾x6". With leads. 117 VAC.
21 A 4103. Wt., 6 lbs. 24.95
21 A 4102. 955-W. Assem. . . .39.95

D **1180-K Capacitor Decade Box Kit.** 100 pF to .111μF; 100, 1000, 10,000 pF steps. 350 V. ±1% mica capacitors. 9x3½x3½". Less leads.
21 A 4105. Wt., 3 lbs. 19.95
21 A 4104. 1180-W. Assembled 29.95

R-C Bridge/R-C-L Comparator

del 950-K. Reads 0.5 ohm to 500 megohms d 10 pF to 5000 μF (4 ranges). Has .05-20 nparator range. Variable 0-500 volt DC urce tests capacitors for shorts, leakage. easures power factor of electrolytics. Less ds. 8x10x4¾". For 105-125 V, 60 Hz AC.
A 4101. Shpg. wt., 8 lbs. 29.95
A 4100. Model 950-W. Assembled. 39.95

CRT Tester/ Rejuvenator

69.95 Kit
$5 monthly*

Model 633-K. Tests and rejuvenates most picture tubes, including latest color TV types. High DC voltage for rejuvenate-welding and short-clearing procedures. 0-150 volt negative DC output for variable G_1 grid cutoff; variable filament over 12 ranges from 1-12 volts. Tests for shorts, open elements, beam current, leakage, tube life. Pushbutton operation; 4½" meter. Transformer power supply. 12¼x9x5". 117 VAC.
21 A 4539 U. Shpg. wt., 9 lbs. 69.95
21 A 4540 U. 633. Assembled. 99.95

EICO KITS

TEST EQUIPMENT

Values in quality Test Equipment for TV-radio service technicians

49⁹⁵ Battery/AC FET VOM..4½" meter

Model 240-K. Solid-state. Ideal for testing semiconductor circuits. 4½" meter, 200 μA movement. P-P ACV ranges: 0-2.8, 8.5, 28, 85, 280, 850, 2800 volts; AC and DCV; 0-1, 3, 10, 30, 100, 300, 1000 volts. Input impedance: 11 meg DC, 1 meg AC. Resp: 25 Hz to 2 MHz. Ohmmeter: 0.2-1000 meg. With Uni-probe. 8½x5¾x5". 117 VAC, or "D" cell and three 9-V batts. Shpg. wt., 5½ lbs.

21 A 4304. 240-K Kit. . 49.95
21 A 4305. Assembled. 69.95

59⁹⁵ Battery/AC FET VOM..6½" meter

Model 242-K. Versatile VOM for vacuum tube and semiconductor circuits. Big 6½" meter with 200 μA movement. P-P ACV ranges: 0-2.8, 8.5, 28, 85, 280, 850, 2800 volts; AC DCV: 0-1, 3, 10, 30, 100, 300, 1000 volts. Input impedance: 11 meg DC, 1 meg AC. Resp: 25 Hz to 2 MHz. Ohmmeter: 0.2-1000 meg. With Uni-probe. 7½x8½x5". 117 VAC, or "D" cell and three 9-V batts. 6 lbs.

21 A 4306. 242-K Kit. . 59.95
21 A 4316. Assembled. 79.95

25⁹⁵ 31-range VOM ..20K ohms/V

Model 565-K. 20,000 ohms/volt DC sensitivity; 4½" meter with 50 μA movement. Ranges: AC-DC, output V, 0-2.5-10-50-250-1000-5000 (AC at 1000 ohms/V); DC, 0-100 μA, 0-10-100-500 mA, 0-10 amps; 0-2000-200,000 ohms, 0-20 megs; −12 to +55 dB. With batteries. Less leads. 6¾x5¼x3". Shpg. wt., 4 lbs.

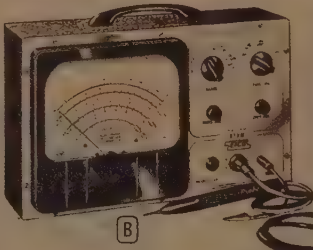
21 A 4268. 565-K Kit. . 25.95
21 A 4269. Assembled. 34.95
21 A 4270. 555-K Kit. Above kit but 1% resistors. 29.95
21 A 4271. Assembled. 39.95

19⁹⁵ 38-range VOM 1000 ohms/V

Model 566-K. Full 4½"
ter. Rectifier in deluxe d
half-wave circuit. Divi
resistors. AC/DC rang
0-1-5-10-50-100-500-5000
at 1000 ohms/volt; 0-1
mA, 0-0.1 ampere; 0-50
100,000 ohms, 0-1 megoh
decibels, −20 to +69
With battery. Less lea
Overall size, 6¾x5¼x
Shpg. wt., 3 lbs.

21 A 4260. 566-K Kit. .1
21 A 4261. Assembled. 2
21 A 4262. 556-K Kit. Ab
kit but 1% resistors. .21
21 A 4263. Assembled. 2

A



B

C

A **Model 232-K P-P VTVM.** Has 4½" meter. Balanced bridge; 1% multipliers. P-P volts, 0-4-14-42-140-420-1400-4200; DC/AC volts, 0-1.5-5-15-50-150-500-1500; resistance, 0.2 ohm to 1000 megs in 7 ranges. 30 Hz to 3 MHz. Uni-probe. 8½x5x5". 117 VAC.

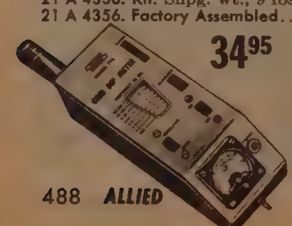
21 A 4235. Kit. 5 lbs. 34.95
21 A 4236. Assembled 49.95

B **Model 249-K P-P VTVM.** Huge 7½" meter. Balanced bridge; 1% multipliers. P-P volts, 0-4-14-42-140-420-1400-4200; DC/AC volts, 0-1.5-5-15-50-150-500-1500; resistance, 0.2 ohm to 1000 megs in 7 ranges. 30 Hz to 3 MHz. Uni-probe. 8½x13x5". 117 VAC.

21 A 4233. Kit. 9 lbs. 39.95
21 A 4234. Assembled 59.95

C **Model 235-K Professional VTVM.** Two-color 6" meter; 200 μA. Balanced-bridge; 1% multipliers. Ranges: P-P volts, 0-4-14-42-140-1400-4200; DC/AC volts, 0-1.5-5-15-50-150-500-1500, (plus 0.5 volt DC range). Resistance, 0.2 ohm to 1000 megs in 7 ranges. 30 Hz to 3 MHz. Uni-probe. 8½x7½x5". 117 VAC.

21 A 4338. Kit. Shpg. wt., 9 lbs. 49.95
21 A 4356. Factory Assembled 69.95



34⁹⁵ 8-range Grid-Dip Meter for Hams, servicing

Model 710-K. Operates as oscillating detector or wavemeter. 400 kHz to 250 MHz. Sensitivity control; 500 μA meter; 1:7 drive ratio; phone jack; plug-in coils. 2¼x2½x6⅞". 117 VAC.

21 A 4223. Kit. Shpg. wt., 3 lbs. 34.95
21 A 4224. Factory Assembled 59.95

Signal Tracer 49⁹⁵

Model 150-K. Solid-state. For A
FM, TV, audio. Independent R
audio inputs. RF demod. prob
direct audio probe. Output tra
former. Speaker. Calibrated met
output indicators. Output: 4
mW. 200 μA meter movement. F
117 VAC. 7½x8½x5".

21 A 4345. Kit. 6 lbs. ....49.

Accessory Probes

PSI-K Signal Injector Probe Kit. Co
less probe generates, injects s
nals covering audio, IF, RF.

21 A 4549. Wt., 6 oz. ....5.
21 A 4545. Assembled. 6 oz. ....9.

Uniprobe Kit. Select DC, AC oh

21 A 4242. Wt., ½ lb. ....5.
21 A 4243. Assembled. ½ lb. ..7.

PTP-11-K. Peak-to-Peak Kit. For 1
meg VTVMs.

21 A 4245. Wt., 1 lb. ....5.

PRF-11-K. RF Kit. Measures to 2
MHz. For 11-meg VTVMs.

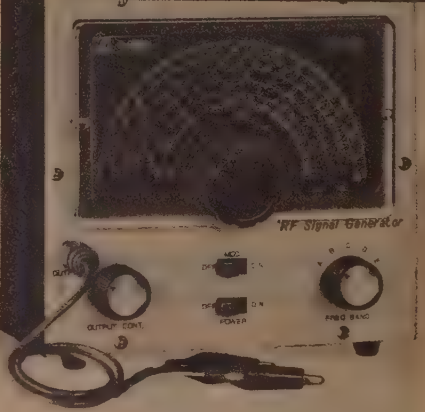
21 A 4251. Wt., 1 lb. ....4.
21 A 4250. Assembled. 1 lb. ....5.

knight-kit
TEST
EQUIPMENT

Battery-powered RF Generator Kit
. . 400 kHz to 30 MHz in five bands

19^{95} $5 monthly
see page 438

Test and troubleshoot FM-AM radios and even TV sets



- Modern all-solid-state circuit
- Precision-wound adjustable coils
- Lightweight, compact, portable
- Printed circuit for fast assembly

nd selector per-
s instant selection
any of the gener-
r's five bands

arly calibrated
nier tuning dial
precise frequen-
selection

ide switch per-
s switching be-
een modulated
d unmodulated
output

OFF
ON
POWER

ick-on power
itch to activate
cuit instantly—no
rm-up required

Knight-Kit KG-696. Fully portable generator kit, ideal for servicing AM, FM radios and audio equipment as well as TV receivers. Checks RF, IF and oscillator alignment; also can be used with sweep generator for TV receiver alignment. Wide frequency coverage, from 400 kHz to 30 MHz in five bands. Clearly calibrated vernier dial and five-position band selector switch make precise frequency selection a snap. Solid-state circuit assures stability and reliable performance. Battery powered, lightweight; great for house calls, in-the-field service—frees you from your workbench. Select either modulated or unmodulated output. Internal 1000 Hz modulation oscillator; transformerless RF oscillator; continuous-type voltage attenuator. Low impedance output; coaxial output connector and leads. On-off switch; adjustable coils. Black metal case, 5⅞x5⅞x3⅝". Uses one 9-volt battery (included). With all parts, PC board, solder, detailed assembly instructions. From Japan.
22 A 3952 X. Shpg. wt., 2 lbs. 19.95

SPECIFICATIONS

Frequency Coverage: 400 kHz to 30 MHz in five fundamental bands. Band A, 400 to 500 kHz; Band B, 550-1600 kHz; Band C, 1.6-4.5 MHz; Band D, 4.5-13 MHz; Band E, 12-30 MHz. *RF Output:* over 100,000 µV. *Modulation:* 1000 Hz. *Audio* 1 kHz, adjustable intensity. *Battery:* Eveready No. 216 or equiv.

Money-saving Test Equipment Outfits for beginners and "pros"

Beginner Electronic Servicing Package

Save $9.35 **54^{50}** $5 monthly
see page 438

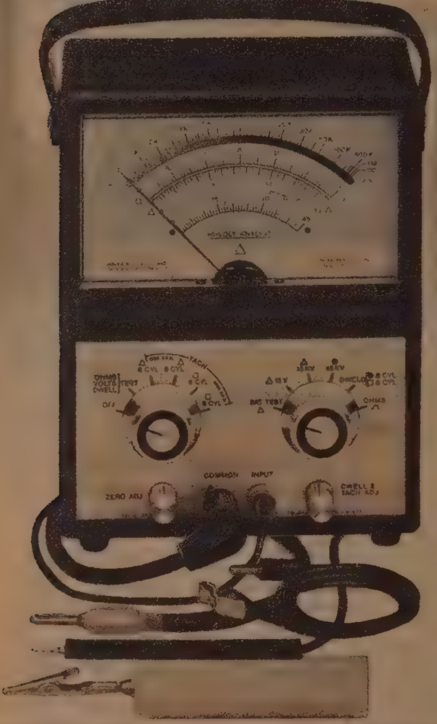
parately, $63.85. For the electronic servicing novice.
cludes KG-696 RF Signal Generator Kit (see above);
G-640 VOM Kit; Howard W. Sams Book, "Electronic
rvicing for the Beginner." VOM features 20,000
ms/volt sensitivity, 57 ranges, diode-protected taut-
nd meter movement. Book is clearly written in non-
chnical language, covers basic troubleshooting. Kits
clude parts, solder, detailed instructions. Japan.
A 0334 L3X. Shpg. wt., 8 lbs. 54.50

Technician Electronic Servicing Package

Save $12.35 **69^{50}** $5 monthly
see page 438

Separately, $81.85. For the experienced technician. Includes KG-696 RF Signal Generator Kit (see above); KG-645A 5000 Ohms/Volt VOM Kit; KG-600C Tube Tester Kit. VOM has 38 ranges, 1% multiplier resistors, eight-scale 4½" color coded meter. Tube tester checks over 2300 tube types and is lightweight, portable and very accurate. All parts, wire, solder, detailed instructions and operator's manual. From Japan.
22 A 0335 L3X. Shpg. wt., 18 lbs. 69.50

DELTA
ELECTRONIC KITS



High-voltage Auto Analyst for engine diagnosis and tuneup

59^{95}

$5 monthly

see page 438

Five instruments in one give you versatile repair capability . . Tach, Dwell Meter, Ohmmeter, DC Voltmeter, plus High-voltage Tester

Portable, self-contained high-voltage auto analyst kit saves you time and money by helping you do your own tuneups, make many re- pairs and adjustments. Provides all the readings necessary fo tuneup and accurate analysis of the modern internal combustio engine. Dependable solid-state circuit for long-life.

Actually combines five instruments in one for complete engin analysis. Tachometer scales indicate engine rpm for setting idle speed adjusting shift points. Dwell-angle scales check distributor operatio and spark advance. Ohmmeter traces circuits, checks coil resistance 0-15 V voltmeter checks battery and voltage regulator. High voltag tester checks spark plug firing voltage, open circuit coil voltage an distributor. Has many other uses.

Easy-to-read scale. Convenient front panel controls. Metal case $6\frac{1}{2}$x8x$3\frac{1}{2}$". With all parts, detailed step-by-step instructions, "AA" batteries, standard test leads, probe, high-tension lead.
22 A 3775 X. Shpg. wt., 8 lbs. 59.9

SPECIFICATIONS

TACHOMETER: Two ranges, 0-1500 and 0-6000 rpm. *Accuracy,* ±2% of full scale reading.

DWELL METER: Two ranges, 0-45° and 0-60°. *Accuracy,* ±1°.

OHMMETER: 1K ohms to 100K ohms. (10K center scale.) *Accuracy,* ±5%

DC VOLTMETER: 0-15 volts DC. *Accuracy,* ±2% of full scale reading.

HIGH-VOLTAGE TESTER: Two ranges, 0-15 and 0-45 kV peak. *Accuracy,* ±5% of full scale reading.

High-accuracy field-effect-transistor VOM Kit

59^{95} $5 monthly

see page 438

10-megohm input impedance for low circuit loading . . 0.3 V and 0.03 μA ranges for precise transistor work

Model 3000. Battery-operated VOM kit provides all the accuracy and precision of a VTVM. Field-Effect-Transistor input permits full 10-megohm input impedance for negligible circuit loading. Advanced design with special integrated circuit amplifier for excellent operating stability. Voltage and current regulation assure precise readings. Has 0.3 V and 0.03 μA full scale ranges for accurate transistor servicing. Reads 0-1000 AC, DC volts (8 ranges); 0-300 mA AC and DC current (8 ranges); 10 ohms to 10 megohms center scale (8 ranges). $6\frac{1}{2}$x8x$3\frac{1}{2}$". With all parts, test leads, battery, instructions.
22 A 3750 X. Shpg. wt., 8 lbs. 59.95

Computach Tachometer Kit

28^{95}

$5 monthly

see page 438

For precise readings of engine rpm. Deluxe engine spee indicator works with any 12-volt ignition system. Ha solid-state computer for 1% full scale accuracy from 0 t 8000 rpm. Easy-to-read illuminated meter. Extensiv filtering circuit, voltage and temperature stabilizatio throughout assure top performance under all operatin conditions. Chrome-plated die-cast housing, $3\frac{1}{2}$" long b $3\frac{1}{8}$" diameter. Red set-pointer, wide-angle sweep, zer parallax. Computer unit is $1\frac{3}{4}$x$2\frac{3}{4}$x$3\frac{5}{8}$" deep. All-angl ball and socket mounting for easy installation. With al leads, cables, easy-to-follow assembly instructions.
22 A 9558. Shpg. wt., 3 lbs. 28.9

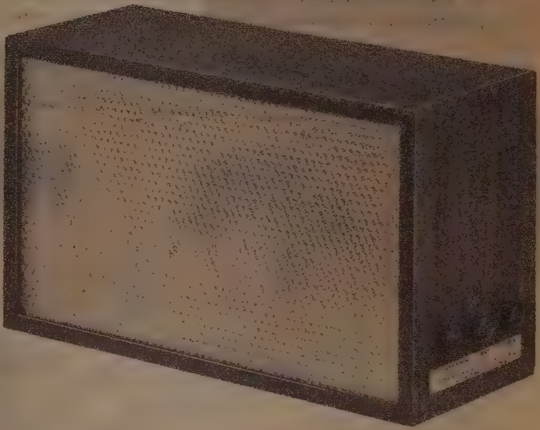
knight-kit
HOBBY

Psychedelic Color Organ Kit . . "see" your way to music enjoyment

All music sounds better when you "see" it in dazzling color . . spectacular light display follows beat and frequency

34^{95}

$5 monthly
see page 438



ht-Kit KG-338. Join the fun with this new device 's sweeping the nation! Easy-to-build color organ adds an entire new dimension to your present o system. Not only will you hear your music as as before, but now you can "see" it as the color n flashes vividly in synchronization with the beat frequency. Prismatic glass lens gives a brightly red "three-dimensional" psychedelic effect. Sound-itive color controller responds to amplitude and uency . . follows any music you play with color intensity changes.

sensitivity of 0.15 VAC and high input im-ance permit intense color displays even at normal ning levels. Three channel, fully electronic system inputs to separate frequencies and match them ifferent colors. Frequencies from 40 to 200 Hz vate red; 200 to 1000 Hz activate green; 1000 to 00 Hz activate blue. Has ganged On-Off/Master rol for overall intensity; separate color controls red and green. Advanced solid-state circuit uses on-Controlled-Rectifiers for fast response and tive switching.

r display does not affect sound quality in any . Handsome vinyl-clad wood case, 8¼x14¼x5¾", lated walnut veneer. Uses standard G.E. bulbs . D33), available for easy replacement anywhere. h all parts, 9 bulbs, instructions. 115 VAC.
3379 X. Shpg. wt., 10 lbs....................34.95

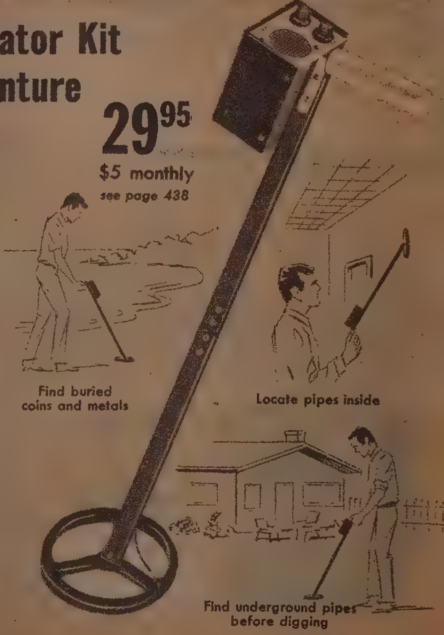
Add a new and exciting dimension to your home stereo system . . "brighten" your combo with sparkling color . . sound-sensitive Color Organ Kit hooks up easily to any audio amplifier . . absolutely no effect on sound quality

Versatile Treasure/Metal Locator Kit makes every stroll an adventure

ays for itself many times over in excitement and racticality! Search for buried coins, antiques, gold and silver, anything metallic. . Take it along on camping and outdoor trips for fascinating explorations

29^{95}

$5 monthly
see page 438


Find buried coins and metals
Locate pipes inside
Find underground pipes before digging

ht-Kit KG-366. Make every stroll an adventure with exciting sure/Metal locator kit. Locates both ferrous metals (tin, iron,) and non-ferrous metals (gold, silver, copper) quickly and y. Super-sensitive . . detects an object as small as a half-dollar o 6 inches beneath the ground. Opens up a whole new world scinating exploration as you detect buried metal objects. Practi-too, use in the home to find plumbing inside walls, in yard or en to locate pipes before digging; it's also ideal for Gas and phone Company servicemen.

netically sealed circular coil is enclosed in shock and heat-tant industrial resin potting compound. Specially designed day shield increases sensitivity, prevents false indications. t-in 2¼" speaker faces the operator for extra-clear audible in-tion when metal object is approached. Pitch increases when tor draws nearer the object . . gives positive audible signal with neters to read or dials to check.

tweight, easy-to-use. Solid-state circuit with IC (RCA 5-sistor) array for excellent stability and reliability. 36" handle llapsible for easy storage. 6½" diameter coil. Uses single 9-volt ery, order below. With all parts, instructions.
3382 X. Shpg. wt., 3 lbs..............................29.95
5980. 9-Volt Battery. Shpg. wt., 6 oz....................2 for 59¢

knight-kit
AMATEUR
GEAR

Six-meter Amateur Transceiver Kit
. . use it in your Ham shack or car

RF and mixer stages are factory-assembled and aligned for peak performance . . solid-state 110-VAC/12-VDC supply for versatility

89.95 $5 monthly
See page 438

TRANSMIT
LOAD
PLATE
knight 2-METER TRANSCEIVER
MODEL TR-106

"... the signal sounded fine, was over S9, and had no drift ... a few nights to build."
73 MAGAZINE

"... puts out an excellent signal ... verified by your reviewer ... reports have been flattering."
POPULAR ELECTRONICS

Knight-Kit TR-106. Perfect choice for the Technician Ham and the Oldtim who wants the best buy in a 6-meter transceiver that operates eith fixed-station or mobile. Operation is easy and satisfying—provid effective, dependable communications. Simplified assembly, too. I corporates the best features of transceiver design. Has precision factor assembled and aligned RF and crystal-controlled mixer stages for ease assembly and best performance.

Features dual-conversion receiver with 0.5-μV sensitivity, AVC for co stant signal level, ANL to cut ignition and pulse-type interferenc 15-watt-input transmitter with plate and screen modulation for lo distortion and excellent linearity. Separate AF and RF gain contro frequency spot switch; automatically switched, illuminated S/F meter; vernier-drive tuning; illuminated dial; transmit indicator ligh Front-panel jack for low-impedance headphones or external speake Front-mounted built-in speaker. Three front-panel crystal jacks. Rea panel VFO input, VFO power output. Pi-network matching 30-90 oh antennas. Built-in solid-state power supply for 110-130 V, 60 Hz A and 12 VDC, negative ground.

With noise-canceling push-to-talk mike, metal case, full instruction 5½x13⅛x11". Optional crystals and other accessories below.
22 A 3460 X. Shpg. wt., 22 lbs. ....89.

SPECIFICATIONS

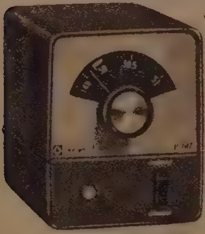
Receiver. *Coverage:* 6 meters, 50-52 MHz. *Input Impedance:* 50 ohms. *Sensitivity:* 0.5 μV. *Selectivity:* 8-kHz bandwidth at 6 dB down. *Audio Output:* More than 5 watts at 10% distortion. **Transmitter.** *Stages:* doubler, tripler, straight-through final. *DC Power Input:* 15 watts nominal. *Modulation:* AM (high-level plate and screen). *Frequency Control:* Fundamental (8 MHz) crystals or VFO.

USEFUL TRANSCEIVER ACCESSORIES

22 A 3140 X. Base for Desk-Top Use. Holds transceiver at t best angle. Shpg. wt., 5 lbs. ....2.

22 A 3129 X. Mobile Mounting Bracket. For ease in installi transceiver in car or boat. Shpg. wt., 2½ lbs. ....1.

17 A 9404 CS. 6-Meter Crystal. *Specify 8340-8450 kHz* (*kHz*). Shpg. wt., 3 oz. ....**Each** 2.



6 and 2-meter VFO Kit with temperature-controlled Clapp oscillat

24.95
$5 monthly
See page 438

Knight-Kit V-107. Easy-to-assemble VFO with Clapp oscillator for sta variable frequency control of the TR-106 six-meter transceiver or previo 2-meter Model TR-108. Simplicity of operation as well as fine p formance and durability. Oscillator has voltage-regulator-stabilized I supply. Power is drawn from transceiver through connectors on tra ceiver and VFO. Backlighted dial is calibrated for 6 and 2 mete Smooth vernier-tuning. B+ switch and indicator light for stand operation. 5½x4¼x6¼". With all parts, wire, solder, detailed easy- follow instructions.
22 A 3461 X. Shpg. wt., 5 lbs. ....24.

Power-boosting Linear Amplifier Kit for 6 or 10-meter SSB-AM-CW transmitters

99.95

$5 monthly
See page 438

knight
6/10 METER LINEAR AMPLIFIER
LOAD
PLATE
Model T-175
GRID BIAS

" . . . economical way to really work out . . . you'll have the best signal on the block . . . it's a darn good investment."

73 MAGAZINE

" . . . a nice addition to Allied Radio's popular kit line . . . tested primarily on 6 meters . . . performs equally well on 10 . . ."

POPULAR ELECTRONICS

ight-Kit T-175. Six and 10/11-meter* linear amplifier builds up input power to 0W PEP SSB, 150W CW, 120W AM. Makes a real difference in range and adability. Requires drive of only 1-15W PEP SSB, 1-7W CW, 1-4W AM.

eatures two illuminated meters for plate-current and grid-current/relative-wer. Internal automatic antenna changeover circuit for SSB, AM, and low-eed CW—with no internal connection to transceiver required. Rugged fan r forced air cooling during transmit. Thermal radiators on plate caps reduce be temperatures. Standard SO-239 coaxial connectors.

put Impedance, 50 ohms nominal; Output Impedance, 50-70 ohm pi-network. /2x13⅛x11". Coils supplied for *26.960-29.700 MHz and 50-54 MHz. With l parts, wire, solder, detailed instructions. For 110-130 V, 60 Hz AC. ***Illegal r Class D CB Operation in U.S.A.**

A 3463 X. Shpg. wt., 22 lbs. 99.95

SPECIFICATIONS

equency Coverage: *26.960-29.700 MHz and 50-54 MHz. Power Input (DC): M, 120W max; CW, 150W max; SSB, 300W PEP max. *Drive Requirements:* M, 1-4W; CW, 1-7W; SSB, 1-15W PEP max. *Input Impedance:* 50 ohms ominal. *Output Impedance:* pi-network, 50-70 ohm loads with a VSWR of 3:1 less. *Tubes:* 6JE6A output amplifiers; 12AT7 relay amplifier. *Primary Input.* 0-130 V, 60 Hz AC.

Two-unit WR/Power Meter Kit

16.95

ight-Kit P-2. Measures SWR from 1:1 to 20:1, relative wer from 0-10. Covers 1.8-432 MHz; handles up to W. Flexible two-unit construction—consists of coup- and indicator connected by a 4-ft. shielded cable. ay be left in transmission line. No AC power or bat-ies. Accuracy is better than 10%. Sensitivity adjust-nt. Gray satin finish. Coupler, 2x5x2½". Indicator, 8x6¼x3". SO-239 connectors. All parts, wire, solder, tailed instructions.

A 3627 X. Shpg. wt., 3 lbs. 16.95

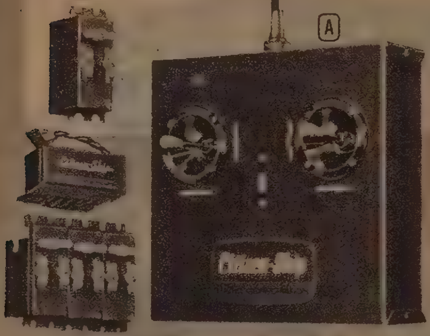
Grid-Dip Meter Kit covers 1.5 to 300 MHz

23.95 $5 monthly
See page 438

Knight-Kit G-30. Covers from 1.5 to 300 MHz in 6 ranges. Dial scales are color-coded to match coils. Sensitivity control for optimum grid current adjustment. Movable hairline cursor for fast, accurate readings. Becomes a crystal oscillator with a standard-spaced plug-in crystal. Phone jack permits use as modulation monitor or regenerative detector. 6⅜x3¼x1⅝". With 6 coils in plastic case, instructions. For 110-130 V, 50-60 Hz AC.

22 A 3721 X. Shpg. wt., 2 lbs. 23.95

Ready-to-use four-channel R/C System
with digital proportional control



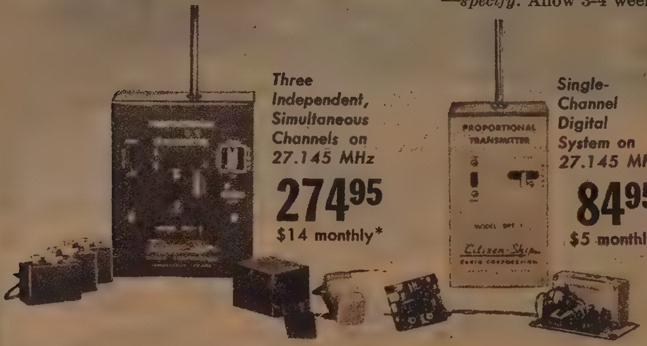
Model DV-4
329⁹⁵ 27.145 MHz
$16 monthly*

Model DV-4 assembled Radio Control System
Four independent, simultaneous channels .
Transmitter has built-in Battery Charger an
nickel-cadmium Battery Pack . . Receiver ha
integrated circuits in decoder for exact control

A Citizenship DV-4. Ready-to-use four-channel digital proportion system ideal for Aero Commander and Kwik Fli on next pag DPR-4 Transmitter has built-in battery charger for nickel-cadmiu battery pack. DPR-4 Receiver has harness with 5 plugs. DMS serv (4 included) has IC reference generator, 3 outputs, 5-pole motor. F 27.145 MHz only. Transmitter, 7½x6⅜x1¾". Receiver, 1 31/32x2 33/6 61/64". **R/C License Required.**
22 A 3763 S. Shpg. wt., 7 lbs. . . . . .329.

22 A 3764 F. Above, but for 26.995, 27.045, 27.095, 27.195 or 27.2 MHz—*specify*. Allow 3-4 weeks delivery from Indiana. . . . . . . .329.

22 A 3768 F. Above, but for 72.080, 72.240, 72.400 or 75.640 MHz——*specify*. Allow 3-4 weeks delivery from Indiana. . . . . .349.



Three Independent, Simultaneous Channels on 27.145 MHz
274⁹⁵
$14 monthly*

Single-Channel Digital System on 27.145 MHz
84⁹⁵
$5 monthly*

34⁹⁵
$5 monthly*
Single-Channel . . 27.145 MHz

Three-channel R/C System

Citizenship DP-3. Digital-proportional radio control system with 3 channels. Same features as DV-4 above. Battery charger and nickel-cadmium battery pack; 3 DMS servos. Transmitter, 6⅞x5¾x2¾". Receiver, 2½x1⅞x1¾". Fully assembled. Order 1 battery below. **R/C License required.**
22 A 3772 S. Wt., 6 lbs. 274.95
18 A 5652. Burgess D6 Batt. 1 lb. . . .1.36

22 A 3773 F. Above, but for 26.995, 27.045, 27.095, 27.195 or 27.225 MHz—*specify*. Allow 3-4 weeks delivery from Indiana. 6 lbs. 274.95

22 A 3774 F. Above, but for 72.080, 72.240, 72.400 or 72.640 MHz—*specify*. Allow 3-4 weeks for delivery from Indiana. 6 lbs. 299.95

One-channel R/C System

Citizenship DP-1. Fully assembled Digital proportional Radio Control system for single-channel uses. Transmitter (6⅜x3⅝x2⅜") has vertical control stick. Receiver (2¼x1¾x⅞") has superhet circuit. Switch and servo are board-mounted with all connections for receiver and batteries. For 27.145 MHz. **R/C License required.** Order batteries below.
22 A 3761 S. Wt., 3 lbs. 84.95

22 A 3762 F. Above, but for 26.995, 27.045, 27.095, 27.195 or 27.225 MHz—*specify*. Allow 3-4 weeks for delivery from factory in Indiana. Shpg. wt., 3 lbs. 84.95

18 A 5083. Battery. (Use 4). 4 oz. . 2/27¢
18A5652. Battery. (Use 1). 1 lb. Ea. 1.57

Medium-range R/C System

MRC-Futaba F-66. Ready-to-opera single-channel Radio Control syste ideal for use with small model plane boats and cars. Solid-state circuit f dependable operation on 27.145 MH

Strong, super-regenerative relayle receiver has tuning lamp for peak o erating efficiency. Transmitter h retractable antenna, operates on stan ard pencell batteries (order below).

Full installation diagram and o erating instructions are include Compound escapement operates fr receiver batteries. Transmitter, 4 2⅝x1¼". Receiver, 1⅛x1½x1 From Japan. Shpg. wt., 1 lb.
22 A 3770 S. . . . . .34.
18 A 5083. Batt. (Use 10). 4 oz. . . 2/2

22⁹⁵

.19 R/C Engine

Veco. Radio Control engine, ideal for small model planes. Features Meehanite piston design for long life, reduced break-in period. Includes coupled exhaust/intake throttle control for added reliability. Fully assembled and ready to mount. Shpg. wt., 1 lb.
22 A 3753 S. 22.95

.61 R/C Engine

Veco. Higher power engine for larger models. Features linear control carburetion from idle to maximum rpm. One-piece die-cast aluminum alloy case; hard chrome-plate cylinder sleeve. No tension, single ring, low expansion piston. Fully assembled, ready to mount.
22 A 3754 S. Wt., 1½ lbs. . . .44.95

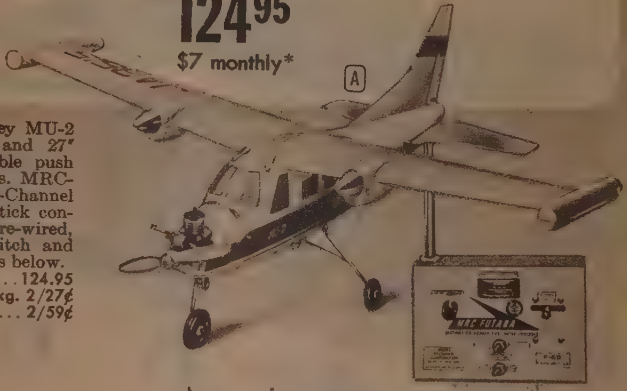
44⁹⁵

**Buy now with no money down . . see page 438 for full Credit Deta*

Ready-to-operate Radio/Control Plane Outfit with rudder and motor control

Fully assembled and painted foam plastic Plane . . Motor, Transmitter and Receiver plus all Accessories . . Rudder and Motor Control System for realistic operation

124.95
$7 monthly*



MRC-Futaba. Exciting model of the Mooney MU-2 300-mph prop jet. Has 37″ wingspan and 27″ selage, landing gear and wheels, adjustable push ds, fuel tank and line, metal motor mounts. MRC-aya .09111 TV engine and propeller. Single-Channel ·69 transmitter with electronic keying for stick con-ol of rudder and positive motor control. Pre-wired, ounted actuators, connectors, harness, switch and ttery holders. Extra paint, cement. Batteries below.

A 3771 X. Japan. Shpg. wt., 10 lbs. 124.95
A 5083. Batteries. Use 11. Wt., 10 oz. . . . . .**Pkg. 2/27¢**
A 5980. 9-Volt Battery. Use 1. Wt., 10 oz. . . . . . . 2/59¢

24.95
$5 monthly*

Fully assembled and ready-to-operate

R/C Car Outfit with Sequential Control

as single channel forward/reverse, left/right, stop/start quential control. Handsomely designed 14″ long sedan. ystal-controlled transmitter with extended range cir-itry; transmit button. Solid-state receiver with relay precise control. Order batteries below. Japan.

A 3757 X. Shpg. wt., 5 lbs. 24.95
A 5079. "D" Batteries. Use 2. Wt., 8 oz. . . . .**Pkg. 4/65¢**
A 5980. 9-Volt Battery. Use 1. Wt., 10 oz. . . . . 2/59¢

59.95
$5 monthly*

Fully assembled and ready-to-operate

R/C Car Outfit with Proportional Control

Red, hard-top sedan is 10½″ long, has chrome trim, grill, bumpers and hub caps. Proportional power steering and reverse permit any degree turn. High-low speed switch; positive steering wheel control. With 12 flagged obstacles for exciting "Skill Driving." Batteries below. Japan.

22 A 3758 X. Shpg. wt., 6 lbs. 59.95
18 A 5078. "C" Batteries. Use 4. Wt., 4 oz. . . . .**Pkg. 2/33¢**
18 A 5980. 9-Volt Battery. Use 1. Wt., 10 oz. . . . . 2/59¢

8.95

Cessna 150 Plane Kit

lwest. Semi-scale model of the rld's most popular plane. Use with gle-channel DP-1 or F-66 Radio ntrol systems (opposite page). 44″ ng span, 264 sq. in. area. Molded m wing and stab, shock absorbing e gear. Takes .049 engine. Easy to emble. Wheel, hub kit below.

A 9511 X. Wt., 2½ lbs. 8.95
A 9507. Wheel, Hub Kit. 5 oz. . . .2.95

34.95
$5 monthly*

Kwik-Fli III Plane Kit

Top-Flite. Contest aerobatic model plane for use with multi-channel DV-4 Radio Control system and Veco .61 engine (opposite page). 60″ wing span, 53″ long. Shaped longerons and spar tapers for easy assembly. Control surfaces hinged with Super-Monokote adhesive. Instructions. Less wheels, Radio Control equipment, engine.

22 A 3751 X. Wt., 7½ lbs. 34.95

29.95
$5 monthly*

Aero Commander 100 Plane Kit

Du-Bro. Easy-to-assemble model of a respected 4-place private plane. Use with DP-3 Radio Control system and Veco .19 engine (opposite page). Foam-core wing/stabilizers, servo rails, fuel tank in reinforced fuselage. 49″ wing span, 36″ long. Near scale appearance. Pre-formed die-cut parts. Less wheels, Radio Control equipment, engine.

22 A 3769 X. Wt., 6 lbs. 29.95

lo money down, low monthly payments . . see page 438

knight-kit
HOBBY

Shortwave Receiver Kit puts the world at your fingertips . . 4-band listening at a low price

29⁹⁵ $5 monthly
See page 438

SPAN MASTER II
VOLUME
PHONES
BFO
SELECTOR
knight
OFF
OFF

Hear English and foreign language broadcasts from the capitals of the world

Knight-Kit Spanmaster® II. An ideal first receiver for aspiring SWL's and Hams. Offers full communications coverage on 4 bands: 550-1600 kHz AM; 1.5-4.5 MHz, 4-12 MHz, and 11.5-30 MHz Shortwave. Lets you listen to many English and foreign language broadcasts from other continents . . tunes in Hams, CB'ers, U. S. government stations and much more, plus your local AM broadcast stations.

It's easy and fun-to-build too, with full step-by-step assembly instructions, oversize illustrations and easy-to-follow wiring diagrams. You'll find shortwave listening even more exciting knowing you built the kit yourself. Has calibrated vernier tuning dial for precise station selection; sensitive superhet receiver circuit. Delivers 1-watt audio output for full volume from built-in 3" speaker. Even b beat-frequency oscillator to vary the pitch of CW sign for clear reception of Morse Code broadcasts. Has on- pilot light; front panel headphone jack for private liste ing; isolated power transformer for safe operation. Efficie circuit uses four tubes, plus rectifier. Fuse protection p vents damage to components.

Gray crackle finish steel cabinet, 5⅝x9⅝x6". Step-b step assembly instructions are easy enough for a youngst to follow. 110-130 V, 60 Hz AC. From Japan.

22 A 3170 X. Shpg. wt., 8 lbs. . . . . .29.
22 A 3099 X. Optional Antenna Kit. Wt., 1 lb. . . . . .1.
22 A 3257 X. Dual Headset with Cord and Plug. 1 lb. . . . . 2.

Portable AM Radio Kit features "Modular" Concept prewired PC board

knight
MW
ALL TRANSISTOR

Critical circuits assembled and READY-TO-USE . . All you do is solder interconnections. PC board circuit is factory-tested. See pg. 447.

12⁹⁵

Handsomely styled solid-state portable great for beach and picnics . . . or just around the house

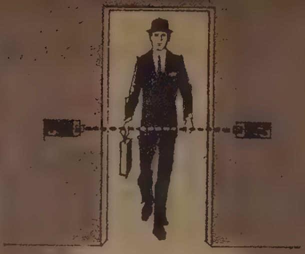
Knight-Kit Ranger IV. Top-value portable AM radio is ideal a starter kit for beginning hobbyists. All critical circuits are p wired and aligned at the factory for simple, foolproof assemb Has dependable solid-state circuit . . pulls in plenty of statio yet keeps battery drain to a minimum. Built-in 4" speaker clear sound indoors or out. Attractively styled unit enhances a room in the house; is lightweight and compact enough for e carrying at beach or picnic. Has built-in ferrite antenna for creased sensitivity. Tunes 540-1600 kHz AM band. High-imp case, 8x10½x3½", carrying handle. With 4 "D" batteries, st by-step assembly instructions. From Japan.

22 A 3908 X. Shpg. wt., 4 lbs. 12
18 A 5079. Extra "D" Batteries. (Use 4.) 10 oz. . . . . Pkg. of 4 for

Photoelectric Relay Kit with light source . . effective switching distance of up to 50 feet

Offers low-cost, effective protection when used as alarm, plus accurate signals for counting and switching

19.95
$5 monthly
See page 438



knight
KG 833
PHOTO-ELECTRIC RELAY SYSTEM
EXCITER LAMP UNIT
POWER
knight
KG 833
PHOTO-ELECTRIC RELAY SYSTEM
RECEIVER
HIGH

ight-Kit KG-833. Sensitive photoelectric relay unit s hundreds of uses around the house, at office or op, in factories, warehouses, garages. Functions an effective alarm against intruders; provides curate counting for merchandise, people entering d leaving a given area, production line units, ıch more. Consists of exciter lamp with built-in ht source, plus photoelectric relay receiver. Oper- es from 110-130 V, 60 Hz AC line.

ovides continuous beam between light source and ay unit. When beam is broken, unit sounds alarm, ll or buzzer, or provides signal to electronic count- Installation is fast and easy. Simply connect np and receiver unit so that light beam is aimed ectly into "eye" of receiver. Variable sensitivity ntrol provides exact beam power for desired dis- nce. Units can be placed up to 50-ft. apart in rkened areas; up to 15-ft. apart for operation in ylight or brightly lit areas.

action time: 50 m/m per second (at a distance of -ft. between units). Working temperature range: ° to +104° F. Power consumption: Exciter lamp, V/amp; receiver, 0.5 V/amp. Units encased in gged metal housings. Each unit, 3x6x5". With sy-to-follow step-by-step assembly instructions, unting hardware. From Japan.
A 3381 X. Shpg. wt., 8 lbs. 19.95

knight
TELEPHONE AMPLIFIER
VOL
MAIN
REMOTE
REMOTE CONTROL CENTER

For convenient "hands-free" use

6.95 Ⓐ

Remote control of TV, radios, phonos

Ⓑ **7.95**

Ⓐ Telephone Amplifier Kit

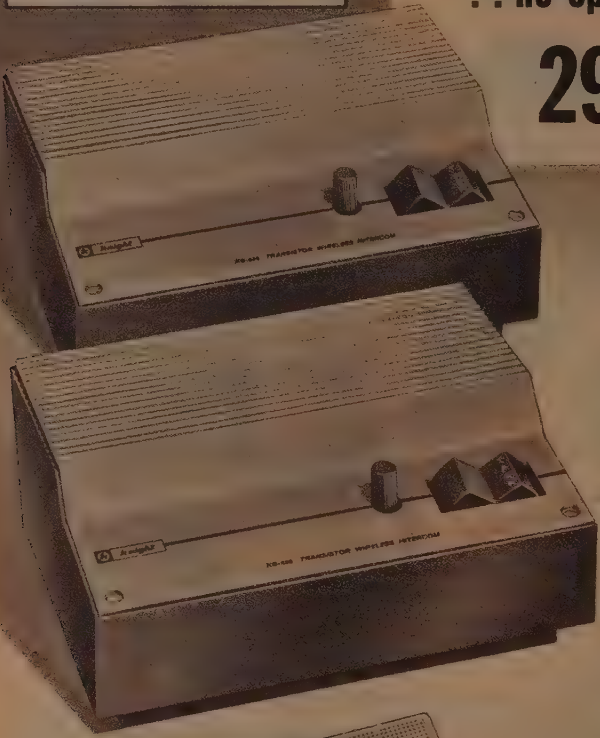
Knight-Kit KG-205. Solid-state telephone amplifier kit permits "hands free" conversation. Lets the whole family listen to calls from friends and relatives. Excellent aid for the hard-of-hearing, too. Amplifies the sound from your telephone to room level without any electrical connection to phone. Has suction cup mount for instant connection to any telephone. Volume control, on-off switch. Attractively styled unit, 4x3x1¾". With 9-volt battery, all parts, step-by-step assembly instructions. From Japan.
22 A 3333 X. Shpg. wt., 1 lb. 6.95

Ⓑ Remote Control Center Kit

Knight-Kit KG-229. For radio, TV and phono. Lets you operate volume and on-off functions from your easy chair. Has built-in speaker, 60-minute timer, main-remote switch and volume control. Turns sets off after pre-set delay of up to 60 minutes; controls volume of set's speaker or its own built-in speaker. Earphone jack for private listening without disturbing others. Compact case, only 5x3¾x1⅝". With 15′ remote cable, all parts, detailed step-by-step assembly instructions. For 115 VAC. Japan.
22 A 3331 X. Shpg. wt., 1 lb. 7.95

knight-kit
HOBBY

Deluxe solid-state wireless 2-channel Intercom System Kit . . no special wiring to install



29^{95}

Both stations are Masters . . so you can originate calls from either station

- Even talk between adjacent buildings
- Add more stations as they are needed
- Two channels for two conversations at on

Knight-Kit KG-225. Enjoy the convenience of bei
able to move your intercom stations from pla
to place, without special wiring between statio
Just plug each station into any AC outlet. Gre
for home, office or shop. You can talk betwe
house and garage or between adjacent hom
and buildings, as long as they are on the san
electric-line transformer.

In addition, the KG-225 offers dual frequen
(136 and 215 kHz) switch to let you operate
separate, independent systems (4 or more unit
simultaneously. Solid-state circuits permit cle
sound without noise. Compact, streamline
styling. Special volume control won't let volun
drop below an audible level—prevents miss
calls.

Press-to-talk switch with locking position f
continuous transmissions. Solid-state circu
draws hardly more current than an electric cloc
Easy and fun to assemble. Sea foam green a
cream cases, 3¼x8¼x5¾". With all part
solder, and full assembly instructions. For 11
130 V, 60 Hz AC. From Japan.
22 A 0015 L2X. Shpg. wt., 8 lbs. . . . . .29.
22 A 3309 X. Extra Station. 4 lbs. . . . . . . **Each** 19.

Three-Station Intercom System Kit. Master statio
—all 3 can originate calls.
22 A 0016 L3X. Shpg. wt., 12 lbs. . . . . .44.

Low-cost battery powered two-station Intercom Kit

knight
Master
LISTEN-TALK
OFF-ON-VOL

7^{95}

- Battery-powered for use anywhere
- Sensitive—can pick up soft sounds
- Solid-state circuits for clear sound

Knight-Kit KG-234. An all-transistor 2-stati
intercom kit with features found in assembl
models costing over twice as much. Ideal f
baby-minding—sensitive enough to pick
baby sounds in bedroom. Battery-powered
talk between *any* two rooms.

Easy to operate—just press button to ta
release to listen. Volume control is on Mast
station. Circuit permits signal to be sent even
switch is in "off" position on Remote-statio

High-impact plastic cases, gold-color grill
Can be hung on wall. Compact, only 3x1¾x
With 9-V battery, 66-ft. interconnecting wi
plugs. Solder, instructions. Japan.
22 A 3334 X. Shpg. wt., 2½ lbs. . . . . .7.

Learn Morse Code with Code Practice Oscillator kit

7^{95}

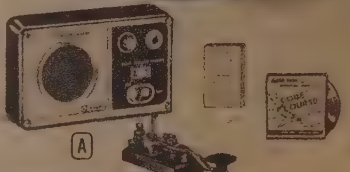
LC-1 CODE OSCILLATOR
LIGHT SPEAKER PHONES
knight

- Battery-powered for use anywhere
- Learn with light, speaker or phones
- Begin to earn an Amateur Radio license

ight-Kit LC-1. Take the first step toward earning your Amateur Radio ense with this portable code practice kit. Makes learning Morse Code as y as possible. It's the ideal kit for aspiring Amateurs, Scouts, students, bbyists. Adjustable hand key gives you the "feel" of on-the-air operation the very beginning. You learn fast as you listen to the clear tone from the lt-in speaker, or watch the built-in flasher. For private operation, just g headset (below) into the front panel jack.

sembly is fun, thanks to Knight-Kit's well-illustrated, step-by-step in- uctions. Two-transistor circuit uses 1½-volt "C" flashlight battery for wer. Handsomely designed black bakelite case, aluminum panel, gray n. 2x6¼x3¾". With all parts, solder, key and battery. Japan.

A 3432 X. Shpg. wt., 2 lbs. 7.95
A 3257 X. Headset. Shpg. wt., 1 lb. 2.50



A

CODE COURSE

B

LC-1 and Code Course Record

off on the right foot with the p of Allied's package offer for the nner in Amateur radio. This out- includes the Knight-Kit LC-1 le Practice Oscillator kit, Battery l Key plus Allied's Beginning Lesson Code Course, complete one easy to understand 12" 33⅓- a record. Makes code easy to learn tarts slow, goes to 15 words per ute. With 20-page manual.

A 0326 L2X. Wt., 3 lbs. 10.95

B LC-1, Code Course, 4 Books

All you need to prepare for the Amateur Exam. Code practice package includes: LC-1 Oscillator Kit, Battery, Key, 10-lesson Course on 12" Record with 20-page instruction manual, plus four A.R.R.L. Books that give a full introduction to Ham radio: *How to Become a Radio Amateur; Learning the Radio-telegraph Code; Radio Amateur License Manual; Operating an Amateur Station.*

22 A 0327 L3X. Wt., 4 lbs. 12.95

lid-state Motor/Speed Light Control kit

- Controls speeds of power tools
- Varies brightness of lamps
- Regulates heating elements

9^{95}

knight
MOTOR SPEED LIGHT CONTROL
KG-201
2
3
4
5
6
7
8
9
HIGH

ght-Kit KG-201. Gives you the right power tool ed for the job. Ideal for sewing machines, blend- lathes; great for portable drills, saws, sanders, er tools with universal AC-DC motors. Controls htness of incandescent lamps and photographic dlights, too. Also for heating pads, coffee makers, sters, and other appliances with heating ele- nts. Calibrated control adjusts output.

id-state circuit uses silicon-controlled rectifier two diodes. For any universal-wound AC-DC or driven device with nameplate rating of 7.5 s or less. For resistive loads to 900 watts, in- descent lamps to 500 watts. Handles 10-amp ges. (Not for AC-only motors, but works with t DC-only motors.) Fully protected by thermal uit breaker. Compact case, only 2⅞x4x1½". h all parts, solder, easy-to-follow instructions. 110-130 V, 50-60 Hz AC.

3335 X. Shpg. wt., 2 lbs. 9.95

ght-Kits are a product of Allied Radio

knight-kit

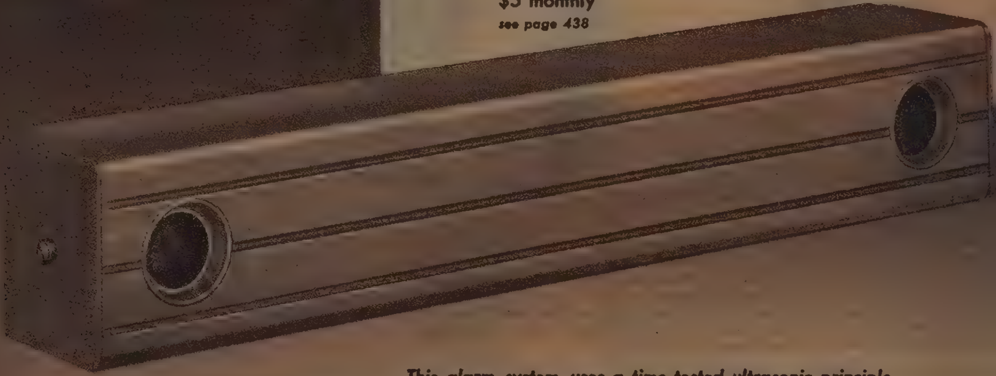
Ultrasonic Intrusion Alarm Kit for protection from burglars or prowlers

69^95^

$5 monthly

see page 438

Protects up to 100 sq. ft. area . . great for entranceways, stairwells and exit areas

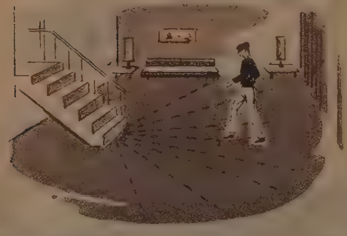


This alarm system uses a time-tested ultrasonic principle . . impossible to detect or avoid . . triggers sound-alarms . . turns on lights or provides remote indication of any moving object that enters the protected area . . easy-to-assemble and install

Alarm sends out invisible untrasonic beam to cover entire 10x10-ft. area

Knight/James KG-642 Sonic Alarm. Ultrasonic alarm system kit provid
effective safeguard against intruders at a surprisingly low price. Uses t
same principle that has been successful for years in banks, detection agenci
industrial plants and other security installations. Provides up to 100 sq.
area protection with the use of a silent and invisible ultrasonic beam. Wh
the beam is broken by an intruder, alarm can be connected to turn on ligh
sound buzzer or bell, or send remote signals indicating a moving object cros
ing the beam. Dependable solid-state circuit for long life and reliable oper
tion, even under constant use.

Ideal for use in homes, apartments, offices or shops. Offers complete install
lation flexibility—can be set up to protect stairways, entrance foyers, ha
ways, storage rooms, other critical areas. Simply install the unit anywher
"aiming" it over the area you wish to protect, and keeping the front of t
unit unobstructed. Great for cars or boats, too. When used in car, unit c
be connected to sound alarm instantly when car door is opened. Has on-of
reset switch (reset has 60-second delay). Variable sensitivity control perm
adjusting the beam further from or closer to the unit for more effective ar
coverage.



Impossible to detect or avoid . . covers entrances, stairways, halls, foyers

Output may be wired for 110-130 V at 500 watts (for direct connection
lamps, horns, buzzers, etc.); or 5-amp control switch (for connection of un
with their own power supplies, 12-volt units, etc.). Simplified assembly wi
entire circuit mounted on a single PC board. With all parts, detailed, no
technical assembly instructions. Size, 2x12x2". For 110-130 V, 60 Hz A
Optional gimbal bracket, alarm bell below.
22 A 3722 X. Shpg. wt., 3 lbs. . . . . .69.

SPECIFICATIONS

Ultrasonic Frequency: 40 kHz.
Area Coverage: 10 ft. x 10 ft. (100 sq. ft. total).
Controls: On-Off/Reset switch (Reset with 60-second delay).
Variable sensitivity control.
Outputs: 110-130 V at 500 watts or 5 amp switch contacts.
Power Requirements: 110-130 V, 60 Hz AC.

Ideally suited for cars and boats . . provides effective area protection

ACCESSORIES

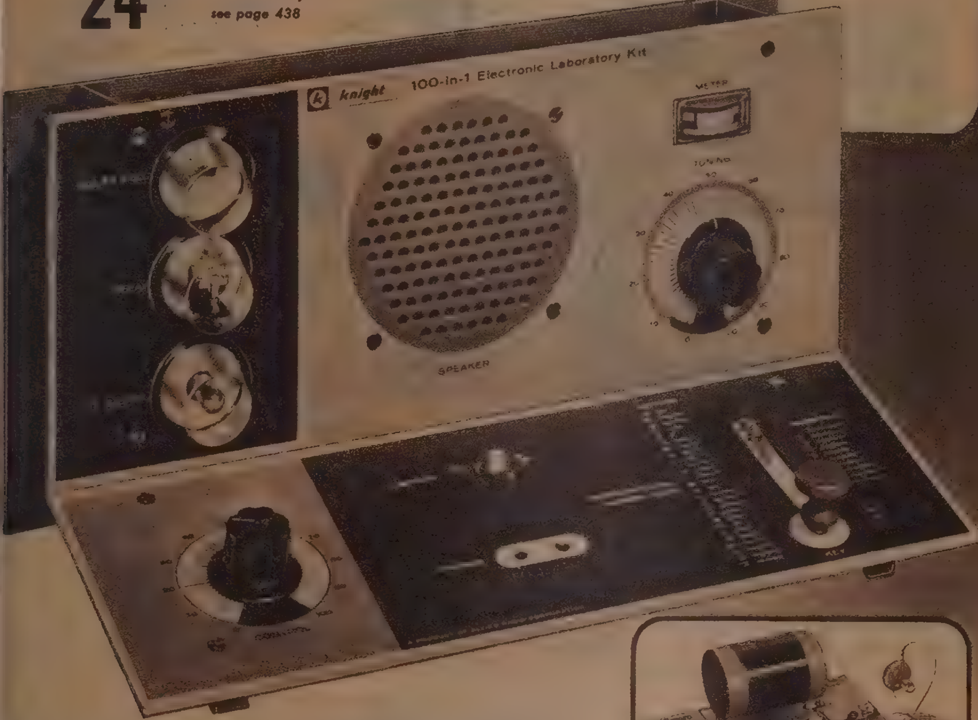
Gimbal-type Mounting Bracket. For KG-642 installation.
22 A 3008 X. Shpg. wt., 2 lbs. . . . . .3.

3½" Bell. For use with KG-642. Shpg. wt., 2 lbs.
26 A 2161 . . . . .5.

6" Bell. For use with KG-642. Shpg. wt., 4 lbs.
26 A 2162 . . . . .24.

Science Lab Kit lets you explore the "secrets" of electronics with over 100 fascinating experiments

24⁹⁵ $5 monthly *see page 438*



ight-Kit 100-in-1 Lab Kit. Fun-filled way to discover the exciting world of ctronics. Create up-to-the-minute projects that are both informative and ertaining. Build a crystal-set radio, code buzzer, transistor radio, audio plifier, more . . over 100 projects in all. It's the perfect instructor for dents, hobbyists and aspiring technicians.

soldering is required. All you need for easy assembly is a screwdriver. ter the main parts are mounted on the Master Control panel, all you do to nge circuits is rearrange a few wires and parts. Strong, spring-type con-tors hold all wires and components firmly in place. Kit includes solar-type otocell, meter, tube and transistors, power transformer, dual headset, aker and antenna—all parts for each project.

ormative 156-page instruction manual has detailed step-by-step instruc-ns plus full illustrations for each project; sections on basic electronics nciples and how to read schematic diagrams. Lab kit, 8x14½x8". For -130 V, 50-60 Hz AC. From Japan.

A 3997 X. Shpg. wt., 8 lbs. 24.95

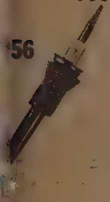
3⁹⁵

Philmore Crystal Radio Kit

Model VC-1000. Same general design as traditional crystal radios, but features convenient variable-capacity tuning and high "Q" coil. Coil is tapped to permanently fixed germanium crystal, for best values of volume and selectivity. Receives standard AM stations without batteries or AC power. Fun to assemble. Offers unlimited hours of listening pleasure. With full instructions, earphone, plastic ear holder. Shpg. wt., 3½ lbs.

22 A 3205 .... 3.95

Tools for easy and accurate kit assembly



56

[A] **Ungar Soldering Iron.** 27 watts. "Taper tip" design for easy PC work. 7½" long. U. L. Listed. 110-120 V, AC-DC.

22 A 3068 X. Wt., 6 oz.................. 2.56

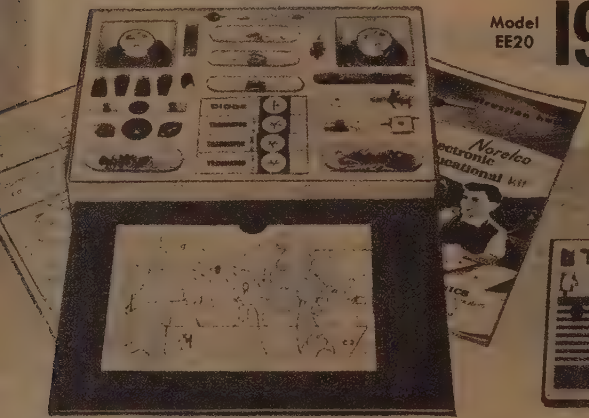
22 A 3067 X. Extra Tip. Wt. 2 oz........ 1.24

[B] **Knight-Kit Tool Outfit.** 5 pieces. Ungar soldering iron (above); 5" wire cutters, 6½" long-nose pliers; 2 screwdrivers, 3½x 3/32" and 4x3/16".

22 A 3070 X. Wt., 1½ lbs.............. 5.95

[B] **5⁹⁵**

Learn electronics the fun way with these deluxe Norelco Kits



Model EE20 **19.95** $5 monthly*

Explore the basic principles of electronics with 23 different, interesting projects! No soldering or tools needed

Norelco solid-state Master Electronics Kit

Model EE20. A world of information and many enjoyable hours are at your fingertips with this fascinating all-transistor kit. Makes 23 different projects—all showing clearly many basic principles of electronics. An individual template for each project makes assembly virtually foolproof. Safe, easy-to-assemble pegboard parts mount with no soldering or tools needed. Make transistor radios, amplifiers, intercom, burglar alarm, electronic organ, code trainer, time switch, rain indicator, much more. Detailed 76-page instruction manual explains every assembly step in easy-to-understand non-technical language, and shows how each circuit operates. Projects are easy to take apart for new projects. Order 9-volt battery, below.

22 A 9593 X. Shpg. wt., 4 lbs. 19.95
18 A 5102. 9-volt Battery. (Use 1.) Shpg. wt., 7 oz. 1.36

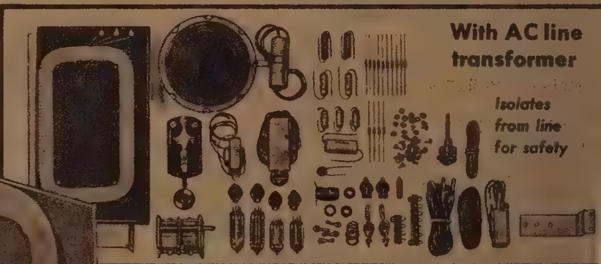
Norelco "Starter" Electronics Kit

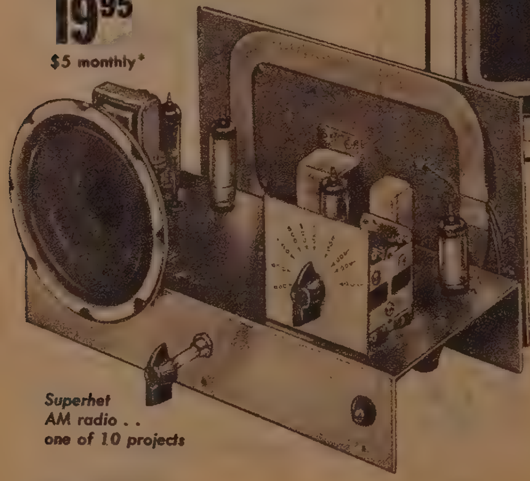
Model EE1050. Wonderful way to begin learning electronics. Exciting basic educational electronics ki builds 12 interesting projects, using newest silico planar transistors. You can build up to 24 project with optional add-on kits listed below. Individua templates are included for each project, along wit a simplified instruction manual, to make assembl easy and fun. You build an amplifier, a burgla alarm, nightlight, traffic beacon, plus 8 more Order 6 batteries below.

22 A 9595 X. Shpg. wt., 2½ lbs. 13.9
22 A 9596 X. EE1051 Kit for 6 More Projects. 2 lbs. 7.9
22 A 9597 X. EE1052 Kit for 6 More Projects. 2 lbs. 7.9
18 A 5083. Penlight Batteries. Wt., 2 oz.... **Pkg. 2/27**

Conar "Adventures in Electronics" 10-project lab Kit Outfit

19.95
$5 monthly*





Superhet AM radio . . one of 10 projects

Exciting 10-project Kit Outfit

Perform ten interesting and rewarding projects whil you study the basic applications of important electroni principles. Detailed study book takes you throug projects increasing in interest until you reach the fina project—an AM broadcast band superhet receive Manual also contains a glossary of electronic terms fo easy reference. Projects include signal tracer, radio broadcast station, secret listener, audio oscillator, audi amplifier, metronome, code practice oscillator, theramin photoelectric controls, and radio. Easy step-by-step instructions for assembling each project. With AC lin isolation transformer. Size, 5½x10½x14". For 110-13 volts, 60 Hz AC.

22 A 9500 X. Shpg. wt., 6 lbs. 19.9

**See page 438 for full Credit detai*

Start learning electronics with one of these easy Raytheon Kits

Selected Kits

ELECTRONIC LABS

See-through solid-state building blocks connect magnetically . . . no wiring, soldering, or tools needed

Low as 9^{95}

y-to-follow structions

Cubes connect magnetically . . No tools needed

Match block symbols with circuit diagrams

Plastic see-thru building blocks

Many functional, working projects

e latest way to learn the principles of elecnics. No previous knowledge or training need- Build a solid-state radio in 2 minutes—take apart and assemble many more projects. Plas- "see-thru" cubes each contain an electronic mponent with its schematic symbol etched on top. Simply place the cubes together on the und-plate, matching the symbols with the grams in the easy-to-follow instruction book.

bes connect magnetically—no wiring, solderor tools needed. Instruction book give you explanation of circuits and components. ads you along gradually and logically until find yourself absorbing electronic principles turally and easily, and having fun too. Projects ild quickly and take apart easily.

Series 1 Raytheon Lectron Cube Kit. Twenty exciting projects. Assemble metronome, morse-code transmitter, code-practice oscillator, grounded transmitter circuit; convert AC to DC; much more. With 8x11″ metal ground-plate, 12 blocks, 100-page manual.
22 A 9590 X. Shpg. wt., 2 lbs. (Order battery below.)........**9.95**

Series 3 Raytheon Lectron Cube Kit. Fifty-six fascinating projects. Assemble transistor radio with speaker, electronic organ, phono and public-address amplifier, burglar alarm, automatic night light, more. 8x11″ metal ground-plate, 21 blocks, 100-page manual.
22 A 9592 X. Shpg. wt., 4 lbs. (Order battery below.)........**24.95**

Series 3A Raytheon Lectron Cube Kit. Sixty-four projects. Assemble 3-stage AM BC-band receiver, electronic alarm clock, more. 13x19″ ground-plate, 31 blocks, 100-page manual. Order battery below.
22 A 3296 X. Shpg. wt., 5 lbs........................**39.95**
18 A 5980. 9-volt Battery. Shpg. wt., 6 oz..........**Pkg. of 2 for 59¢**

Superex Lab 35 deluxe electronics Lab Kit

irty-five projects. Begins with a simple-circuit diode dio, climaxes with an audio-modulated test generator. ild 3-transistor radio, radio broadcast transmitter, solarwered radio, electronic fire and burglar alarm, driver ep alarm. test equipment, audio amplifier, much more. clusive Superex full-size pictorial diagrams and easy-tolow step-by-step assembly instructions make each proj; easy and fun. With batteries.

A 9541 X. Shpg. wt., 5 lbs........................**21.88**
A 9542 X. Superex Lab 18 Electronics Lab Kit. 3 lbs..**11.88**

35 Advanced Projects

21^{88}

$5 monthly*

Electrocraft master electric Build-It Kit

del 810. Over 30 fascinating projects. You build two ctric motors, complete working panels, buzzer unit de-key included), electromagnet, telegraph, traffic sigls, motor-driven boat, dune buggy, electric crane, and ny more. Simplified, illustrated instruction manual kes assembly easy and interesting. Order "D" cells and light batteries below. 21½x13½x2¼″.

A 3660 X. Shpg. wt., 3 lbs........................**8.95**
A 5870. Penlight Batteries. (Use 2.) Wt., 2 oz..**Pkg. 2/20¢**
A 5079. "D" Batteries. (Use 2). Wt., 10 oz.....**Pkg. 4/65¢**

ELECTROCRAFT
ELECTRIC BUILD-IT SET
ELECTROCRAFT

Over 30 Projects

8^{95}

Motorola HEP Semiconductor Devices

HEP-408

HEP-400

HEP-407

Top-quality low-cost line of solid-state devices, offering a broad variety of circuit designs for hobbyists, experimenters and technicians. When used in conjunction with design books (below)—they provide a wide range of informative, practical circuit designs.

22 A 3797 E. HEP-408. Field Effect Transistor Projects. 96 pages. 5½x8½". Shpg. wt., 5 oz. 1.00

22 A 3798 E. HEP-400. Solid-State Projects from Motorola. 68 pages. 5½x8½". Shpg. wt., 4 oz. . . . . 50¢

22 A 3799 E. HEP-407. Integrated Circuits Projects from Motorola. 96 pages. 5½x8½". Shpg. wt., 5 oz. 1.00

COMPLETE DEVICE LINE FOR HOBBYISTS AND EXPERIMENTERS

GERMANIUM TRANSISTORS

Stock No.	Type No.	Description	EACH
22 A 3810	HEP-1	PNP RF Type, 100 MHz, 150 mW	.89
22 A 3811	HEP-2	PNP RF Type, 1000 MHz, 300 mW	1.25
22 A 3812	HEP-3	PNP RF Type, 250 MHz, 100 mW	1.25
22 A 3813	HEP-200	PNP Power Type, TO-3, 3 Amps, 90 Watts	.82
22 A 3814	HEP-230	PNP Power Type. TO-3, 5 Amps, 90 Watts	.89
22 A 3815	HEP-231	PNP Power Type. TO-36, 15 Amps, 150 Watts	1.69
22 A 3817	HEP-232	PNP Power Type. TO-3, 7 Amps, 90 Watts	2.34
22 A 3818	HEP-233	PNP Power Type. TO-36. 15 Amps, 170 Watts	4.20
22 A 3819	HEP-234	PNP High-Voltage Power Type. Vertical Deflection Amp, 200 V, 5 A, 56 W.	3.25
22 A 3820	HEP-235	PNP High-Voltage Power Type. Horizontal Deflection Amp, 320 V. 10 A, 56 W.	4.50
22 A 3821	HEP-250	PNP General-Purpose Type. Medium gain, 200 mW	.79
22 A 3824	HEP-251	PNP General-Purpose Type. High gain, 200 mW	.89
22 A 3828	HEP-252	PNP General-Purpose Type. Low leakage, 200 mW	.89
22 A 3829	HEP-253	PNP General-Purpose Type. Medium gain, 225 mW	.95
22 A 3830	HEP-254	PNP General-Purpose Type. Medium gain, 225 mW	.89

SCR's—TRIGGERS—TRIACS

22 A 3831	HEP-300	Thyristor (SCR) 50 V, 5 A	2.29
22 A 3832	HEP-302	Thyristor (SCR) 200 V, 5 A	2.69
22 A 3833	HEP-304	Thyristor (SCR) 50 V, 15 A	4.35
22 A 3834	HEP-305	Thyristor (SCR) Reverse Polarity. 50 V, 15 A	4.60
22 A 3844	HEP-306	Thyristor (SCR) 200 V, 15 A	5.90
22 A 3845	HEP-307	Thyristor (SCR) Reverse Polarity. 200 V, 15 A	6.20
22 A 3796	HEP-310	Silicon Unijunction. 30 mW	1.10
22 A 3846	HEP-311	Silicon NPN Bilateral Trigger. 35 V, 2 A	.99
22 A 3847	HEP-320	Thyristor (SCR) 50 V, .8 A	.99
22 A 3848	HEP-340	Triac 200 V, 8 A	4.49

ZENER DIODES

22 A 3849	HEP-101	10 V, 400 mW	.95
22 A 3850	HEP-102	3.6 V, 1 W	1.20
22 A 3851	HEP-103	6.2 V, 1 W	1.20
22 A 3852	HEP-104	9.1 V, 1 W	1.20
22 A 3853	HEP-105	12 V, 1 W	1.20

RECTIFIERS AND DIODES

22 A 3854	HEP-134	Germanium diode—substitute for Type 1N34A	.2[illegible]
22 A 3855	HEP-135	Germanium diode—substitute for Type 1N60	.26
22 A 3856	HEP-151	Silicon Power Rectifier—stud-type, 50 PIV, 15 A	.79
22 A 3857	HEP-153	Silicon Power Rectifier—stud-type 200 PIV, 15 A	1.24
22 A 3858	HEP-154	Silicon Rectifier—Axial leads, 50 PIV, 1 A	.36

RECTIFIERS AND DIODES (Cont'd)

Stock No.	Type No.	Description	EACH
22 A 3859	HEP-156	Silicon Rectifier—Axial leads, 200 PIV, 1 A	.49
22 A 3860	HEP-157	Silicon Rectifier—Axial leads, 400 PIV, 1 A	.56
22 A 3861	HEP-158	Silicon Rectifier—Axial leads, 600 PIV, 1 A	.66
22 A 3862	HEP-159	Silicon Rectifier—Axial leads, 800 PIV, 1 A	.92
22 A 3863	HEP-160	Silicon Rectifier—Axial leads, 1000 PIV, 1 A	1.45
22 A 3864	HEP-161	Silicon "Top Hat" Rectifier—50 PIV, 3 A	1.09
22 A 3865	HEP-162	Silicon "Top Hat" Rectifier—200 PIV, 3 A	1.25
22 A 3935	HEP-170	Silicon Rectifier—Axial leads, 1000 PIV, 25 A	.82

MOUNTING KITS, ACCESSORIES

22 A 3841	HEP-450	Mounting Kit for Devices in TO-3 Case	.30
22 A 3839	HEP-500	Heat Sink for Devices in TO-3 Case	2.35
22 A 3826	HEP-501	Heat Sink for Devices in TO-36 Case	2.35
22 A 3800	HEP-452	Mounting Kit for Devices in TO-66 Case	.32
22 A 3803	HEP-451	10-Pin Integrated Circuit Socket. Pkg. of 2	1.49
22 A 3925	HEP-453	14-Pin Dual In-Line Integrated Circuit Socket	.99
22 A 3926	HEP-454	8-Pin Integrated Circuit Socket. Pkg. of 2	1.49
22 A 3927	HEP-455	Mounting Kit for Devices in TO-36 Case	.32
22 A 3928	HEP-456	Mounting Kit for Devices with 10-32 Threads	.30
22 A 3929	HEP-457	Mounting Kit for Devices with ¼-28 Threads	.32

FIELD EFFECT TRANSISTORS

22 A 3795	HEP-801	N-Channel Audio FET	1.59
22 A 3866	HEP-802	N-Channel RF FET	1.59
22 A 3930	HEP-803	P-Channel Audio FET	3.39

DUAL DIODES, RECTIFIER BRIDGES

22 A 3867	HEP-165	Silicon Dual Diode with common cathode	.62
22 A 3868	HEP-166	Silicon Dual Diode with common anode	.60
22 A 3869	HEP-175	Full-Wave Bridge Rectifier—50 PIV, 1 A	1.49
22 A 3870	HEP-176	Full-Wave Bridge Rectifier—200 PIV, 1 A	2.05
22 A 3871	HEP-177	Full-Wave Bridge Rectifier—400 PIV, 1 A	2.25
22 A 3872	HEP-178	Full-Wave Bridge Rectifier—600 PIV, 1 A	3.05

SILICON TRANSISTORS

22 A 3875	HEP-50	NPN RF—100 MHz, 300 mW	.79
22 A 3876	HEP-51	PNP RF—50 MHz, 600 mW	1.29
22 A 3877	HEP-52	PNP RF—100 MHz, 300 mW	.95
22 A 3878	HEP-53	NPN RF—50 MHz, 600 mW	1.15
22 A 3879	HEP-54	NPN RF—30 MHz, 310 mW	1.08
22 A 3880	HEP-55	NPN RF—210 MHz, 310 mW	1.20

SILICON TRANSISTORS (Cont'd)

Stock No.	Type No.	Description	EA
22 A 3881	HEP-56	NPN (UHF Oscillator)—750 MHz, 310 mW	1.
22 A 3882	HEP-57	PNP RF—200 MHz, 310 mW	1.
22 A 3931	HEP-75	NPN Power—TO-5, VHF/UHF, 5 Watts	2.
22 A 3932	HEP-76	PNP RF Power—TO-5, VHF/UHF, 5 Watts	4.
22 A 3883	HEP-240	NPN Power—TO-66, 300 V, 500 mA, 10 W	2.
22 A 3884	HEP-241	NPN Power—TO-66, 120 V, 5 A. 40 W	1.
22 A 3885	HEP-242	PNP Power—TO-5, 40 V, 3 A, 6 W. Comp. to HEP-243	2.
22 A 3886	HEP-243	NPN Power—TO-5, 40 V, 3 A, 6 W. Comp. to HEP-242	1.
22 A 3887	HEP-244	NPN Power—Case 77 "Thermopad," 300 V, 50 mA, 25 W	2.
22 A 3888	HEP-245	NPN Power—Case 77 "Thermopad," 40 V, 3 A, 30 W, Comp. to HEP-246	1.
22 A 3889	HEP-246	PNP Power—Case 77 "Thermopad," 40 V, 3 A. 30 W. Comp. to HEP-245	2.
22 A 3890	HEP-247	NPN Power—TO-3, 40 V, 10 A, 150 W. Comp. to HEP-248	2.
22 A 3891	HEP-248	PNP Power—TO-3, 40 V, 3 A, 150 W. Comp. to HEP-247	6.

DIGITAL INTEGRATED CIRCUITS

Stock No.	Type No.	Description	EA
22 A 3791	HEP-553	MECL Half-Adder	1.
22 A 3792	HEP-554	MECL Bias Driver	1.
22 A 3793	HEP-556	MECL 3-Input Gate	1.
22 A 3794	HEP-558	MECL J-K Flip-Flop	2.
22 A 3892	HEP-570	RTL Quad Gate	2.
22 A 3893	HEP-571	RTL Dual Buffer	2.
22 A 3894	HEP-572	RTL Dual J-K Flip-Flop	3.
22 A 3895	HEP-580	RTL Dual 2-Input Gate	.
22 A 3896	HEP-581	RTL 4-Input Gate	.
22 A 3897	HEP-582	RTL Dual Buffer	.
22 A 3898	HEP-583	RTL J-K Flip-Flop	1.
22 A 3899	HEP-584	RTL Dual 2-Input Gate	1.

LINEAR INTEGRATED CIRCUITS

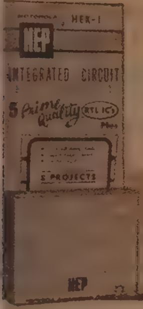
22 A 3873	HEP-590	High-Frequency Amplifier	3.
22 A 3874	HEP-591	Audio IF Amplifier	3.
22 A 3837	HEP-592	Dual (Stereo) Preamp	3.
22 A 3838	HEP-593	1-Watt Power Amplifier	7.

PHOTO TRANSISTOR

22 A 3933	HEP-312	Silicon, sensitive to near ultra-violet	2.

See next page for Motorola Experimenter Kits, informative manuals and handbooks on Semiconductors, and helpful HEP Semiconductor Cross Reference Guide.

emiconductor and IC anuals, Handbooks, Experimenter Kits



Motorola

IC or FET Kit

3^{95} Each

IC EXPERIMENTERS KIT

IEK-1. IC experimenters kit—in-valuable aid for hobbyists, tech-icians, designers. Includes 5 Motorola RTL Integrated circuits —4-Input Gate, Dual Buffer, J-K Flip-Flop, two Dual 2-Input Gates. With tips on using IC's, IC ross-reference guide, and several ractical circuits using the devices ncluded. 8x3½x1$\frac{1}{16}$".
2 A 3801. Wt., 2 oz............3.95

FET EXPERIMENTER KIT

IEK-2. Helpful, educational FET xperimenters kit. Includes: 1-N-channel audio FET; 1 N-chan-el RF FET; 1 NPN silicon tran-istor; 1 PNP silicon transistor. Has ull instructions on making 9 prac-ical circuits, plus tips on using ET's in designing and developing ew circuits, and informative FET ross-reference guide.
2 A 3934. Wt., 2 oz............3.95

ORMATIVE REFERENCE MANUALS

-404. Switching Transistor Handbook. tructive book covers principles of tching transistors. Detailed theory l explanations. 8x5½". 346 pages. g. wt., 15 oz.
A 3805 E............................2.50

-410. Silicon Rectifier Handbook. Cov-theory and application of silicon tifiers. Explains parameters, details rations. 8x5½". 194 pages. Shpg. , 9 oz.
A 3806 E............................1.50

-411. Semiconductor Data Manual. ormative reference source. Explains ameters, covers general theory. 10x ". 1880 pages. Shpg. wt., 4½ lbs.
A 3807 E............................4.95

HEP CROSS REFERENCE GUIDE

A-07. Lists approximately 12,000 iconductor types replaced by the torola HEP- semiconductor de-es. Indexed by JEDEC and Manu-turer's Type Nos. for easy use. 55 es. Shpg. wt., 2 oz.
A 3808 E............................25¢

Selected Kits

HOBBY

Linear IC Variety Pack Kit has 5 integrated circuits for unlimited applications

- Two KD2114 transistor arrays
- One KD2115 audio amplifier
- Two KD2116 transistor arrays

4^{40}

RCA
KD2117 EXPERIMENTER'S IC VARIETY PACK

RCA KD2117. This IC variety pack enables an engineer or experienced hobbyist to extend his knowledge of IC's. Has 12 starter circuits. Pack contains 5 integrated circuits: two KD2114 transistor arrays, one KD2115 audio amplifier, two KD2116 transistor arrays. Includes folder giving 12 useful circuits, their schematic diagrams, parts lists, and features.
22 A 3780. Shpg. wt., 8 oz..........................4.40

SCR Experimenter's Kit builds 10 useful electronic control circuits

- Has one silicon controlled-rectifier assembly
- 2 transistors, 5 rectifiers

9^{95}

RCA
EXPERIMENTERS KIT
KD2105

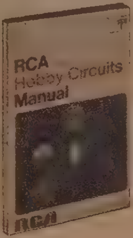
RCA KD2105 Kit. Basic kit has all the active components (additional passive components are required) for building the 10 practical control circuits described in the RCA SCR Experimenter's Manual KM-71 (below, right). Shpg. wt., 8 oz.
22 A 3781......................................9.95

22 A 3782. RCA KD2106 Light Sensor Kit. Has 1 photocell. For KD2105, above. 10 oz..........2.75

22 A 3789. RCA KD2110. Heat Sensor Kit. Has 3 thermistors. For KD2105, above. 10 oz..........2.45

RCA Hobby Circuit Manual

1^{75}



RCA HM-90 Manual. Construction information on 35 semiconductor circuits. Photos, schematics, parts lists. 5⅜x8⅜". 224 pages. 10½ oz.
23 A 7316 E......1.75

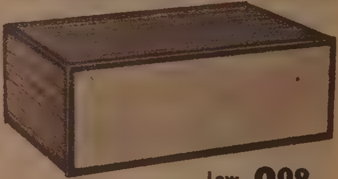
Experimenter's Manual

95¢

95¢
RCA
Experimenter's
Manual

RCA KM-71 Manual. Explains SCR theory and circuitry. Projects are easy to build without special tools. 136 pp. 5½x8½". 7 oz.
23 A 7116......95¢

Flexi-Cab® vinyl-clad custom steel Cabinet Kits



Ideal for hobbyists test equipment, controls, prototypes. Fast, easy, push-together, stay-together assembly using flat panels joined by "links" of mar-resistant plastic with precut mitered corners. Instructions, 40 self-stick labels.

Low as 2^{98}

Stock No.	Description	Size	Lbs.	EACH
22 A 3715	Walnut with brass front panel	3x4x4"	1	2.98
22 A 3717	Black leather, chrome front panel	3x4x4"	1	2.98
22 A 3718	Walnut with brass front panel	3x4x6"	1¼	3.79
22 A 3719	Black leather, chrome front panel	3x4x6"	1¼	3.79
22 A 3723	Walnut with brass front panel	3x6x9"	2	4.49
22 A 3724	Black leather, chrome front panel	3x6x9"	2	4.49

EICOCRAFT
HOBBY KITS
$4.95
$6.95

Discover the world o

- Comprehensive and complete step-by-step instructions included in each kit
- Top quality solid-state circuits for complete reliability
- Offers an exciting new hobby that the whole family can enjoy
- Demonstrates important electronic principles—fun to use

Here's an exciting selection of easy-to-assemb electronic kits at really low prices. These kits ar perfect as an introduction to the fascinating field electronics, for hobbyists or for learning kit build ing. Each kit has a useful application, and all ar supplied with professional parts.

"Treasure Finder" Kit

Model EC1900. Have fun building this metal locator kit. Beat-frequency battery-operated kit can be used to locate both ferrous and non-ferrous metals (iron, steel, etc.) and non-ferrous metals (gold, silver, copper, etc.). Consists of two RF oscillators and a search loop.

Distinctive audio signal goes up when it locates buried ferrous metals, and the frequency goes down when it locates non-ferrous metals. Use G124 SPST switch, and 9-volt battery listed on opposite page. 5½x8½x1½". Less stick. With instructions.
22 A 9581. Shpg. wt., 8 oz........9.95

Electronic Aircraft Converter

Model EC-2900. Enjoy the excitement of monitoring local aircraft communications with this VHF converter; plus the fun of building the converter yourself. Adapts to any standard AM radio for VHF monitoring. The EC2900 is an all-transistor converter operating from the 108-136 MHz band.

Can be operated in your car or in your home for easy portability. No interwiring is necessary. Operates simply by placing the converter next to your AM radio. Completely battery operated. Takes nine-volt battery on opposite page. Instructions.
22 A 3047. Shpg. wt., 8 oz........7.95

Low-Band Police Converter

Model EC-2700. Add a VHF conver to your AM radio and monitor exc ing broadcasts from local police, fi Civil Defense, emergency servic mobile telephones and many othe For home, car, or as a portable un

Operates in the 30-50 MHz ba Modern all-transistor design, opera simply by placing converter next any AM radio. No interwiring nec sary. Battery operated. Takes ni volt battery on opposite page.
22 A 3048. Wt., 8 oz.............7.

Model EC-2800. Same as above, b operates in the 152-175 MHz ba
22 A 3049. Wt., 8 oz.............7.

Electronic Siren Kit

Model EC100. Emits penetrating, attention getting wail—ideal for use as a burglar alarm. Also can create sound effects for model railroads, etc. Use with A, B, and D listings on opposite page. 5½x8½x1½".
22 A 9577. Shpg. wt., 8 oz..........4.95

Versatile 2-watt Audio Amplifier Kit

Model EC300. Has 2-watt output. Takes microphone, radio, other high-level inputs. Use 2 for stereo. Ideal for small PA. Use A and B shown on opposite page. 5½x8½x1½".
22 A 9579. Shpg. wt., 8 oz..........5.95

Electronic Tremolo Kit

Model EC500. Three-transistor tremolo gives guitar, bass, etc., professional sound. Sets to desired speed and intensity. Phone jacks. Use E and C on opposite page. 5½x8½x1½".
22 A 9580. Shpg. wt., 8 oz..........9.95

"Do Nothing" Mystifier Kit

Model EC700. Fascinating oscillator circuit of 6 blinking lights. You control the geometric sequences of never-ending entertainment. Takes F on opposite page.
22 A 3054. Shpg. wt., 8 oz..........4.95

AC Power Supply Kit

Model EC900. Transformer-operated 6 VDC power supply can convert all Eicocraft kits using 6-volt battery to AC. Full-wave bridge rectifier, high-capacity filter. Takes D, opposite page. 110-125 VAC. 5½x8½x1½".
22 A 9582. Shpg. wt., 1 lb........8.95

Ham/CB VOX Kit

Model EC1700. May be used with CB or Ham transmitter. Actuates the transmitter when speaking into the microphone and return to receive. Takes A on opposite page.
22 A 3055. Shpg. wt., 8 oz..........8.95

Voice-operated Switch Kit

Model EC1300. Permits audio control of remotely operated devices, such as radio, TV. Can be activated by whistles, musical instruments. Takes A on opposite page. 5½x8½x1½".
22 A 9584. Shpg. wt., 8 oz..........8.95

FM Radio Kit

Model EC1400. Covers 88-108 MHz FM broadcast band. Can be used with earphone (supplied), or as FM tuner with amplifier. (EC-300). Use E on opposite page. 5½x8½x1½".
22 A 9585. Shpg. wt., 8 oz..........9.95

AM Radio Kit

Model EC1500. Tunes favorite pr grams on the AM broadcast ba (550-1600 kHz). Use as personal ra (with earphone), or as an AM tun with EC-300 amplifier. Use E on o posite page. 5½x8½x1½".
22 A 9586. Shpg. wt., 8 oz.........8.

Electronic TOX

Model EC1800. Touch-operated swit with relay amplifier. Provides a sign that can respond to an intrude touch and sound an alarm bell. Tak E on opposite page.
22 A 3056. Shpg. wt., 8 oz.........8.

Electronic Eye

Model EC2200. Sensitive resistor tects light and amplifier boosts t signal. Relay which latches on or can control bell, appliance, etc. Use on opposite page.
22 A 3058. Shpg. wt., 8 oz.........9.

Magic Switch

Model EC2100. When touch plate co nected to amplifier is touched, a re opens or closes providing a sig which turns any appliance off or o Use E on opposite page.
22 A 3060. Shpg. wt., 8 oz.........9.

icocraft solid-state Kits

- No technical knowledge or experience needed to build these exciting kits
- Predrilled, copper plated and etched printed circuit boards
- Ideal for students involved in school science fair projects
- Each kit is educational as well as instructive, with useful applications

l kits have predrilled, printed circuit boards. mprehensive, easy to follow step-by-step instruc- ns are included. Offers fun for the whole family. idents and hobbyists will find them educational, tructive, as well as fun to build. No technical owledge or experience is necessary.

EICOCRAFT

HOBBY KITS

Electronic Organ Kit

del 2000. Solid-state one-octave ctronic organ produces eight organ ies by means of a twin-T oscillator i selected potentiometers. Supplied h a built-in preamplifier. Use with ocraft EC300 audio amplifier or other for deep, full clear tones.

o or more of these organs can be yed in harmony to produce the ceful chord structures. Ideal multi- e generator for general purpose lio generator, or general purpose ting. Takes 9-volt battery and e G124 switch listed below. Size, x8½x1½".
A 9583. Shpg. wt., 8 oz........9.95

Electronic Bongos Kit

Model EC-1600. For rock groups or for your own enjoyment. Powerful 3-transistor, battery-operated bongos circuit kit electronically produces the exciting sounds of high-pitched and low-pitched bongos, tom-toms, bass drum, marimba, and claves, when used with an amplifier or speaker.

Ideal for use with electric guitars or other musical instruments. The sounds are created by 2 electronic "ringing" oscillators and a preamplifier; each oscillator emits a sound when its touch plate is touched by the player. Takes E and D below.
22 A 9587. Shpg. wt., 8 oz..........7.95

Electronic Bullhorn Kit

Model EC-2400. Use this fascinating "Bullhorn" to hail boats on the lake, or as a portable Public Address System in a variety of ways. The EC2400 is a new dimension in sound projection kits, as well as an interesting and useful project the whole family will enjoy building and using.

Portability and versatility of application plus up to 3.5 watts of penetrating power are yours in this basic two-transistor power amplifier. Includes a sensitive carbon-type microphone and speakers. Takes A listed below. Complete with instructions.
22 A 3061. Shpg. wt., 1 lb........8.95

Audio Preamplifier

del EC2300. For audio, hi-fi and public dress. Inputs for AM or FM tuner, mag- tic cartridge, tape head and high-im- dance microphone. 3-transistor circuit mprises 2 high-gain amplifier stages for v distortion. Uses E and D below.
A 3063. Shpg. wt., 8 oz.............8.95

Eicocraft Kit Accessories

Type 510S 6-Volt Lantern Battery. Has binding posts. Shpg. wt., 1½ lbs.
A 5085..............................99¢

3.2-Ohm Speaker. Quality 4" speaker for fine sound. Shpg. wt., 8 oz.
A 3476..............................1.59

Type G361 3PDT Switch. 3-pole double throw switch. Shpg. wt., 2 oz.
A 5918..............................1.00

Type G124 SPST Switch. For on-off control, other uses. Shpg. wt., 2 oz.
A 5034..............................50¢

Allied 9-Volt Battery. Top-quality, American made. Shpg. wt., 6 oz.
A 5980....................Pkg. of 2 for 59¢

Type P60 90-volt battery. American made.
18 A 5651. Shpg. wt., 1 lb.............2.97

Solid-state Wireless FM Microphone Kit

Works with standard FM radio or tuner

9^{95}

Model EC1100. Wireless FM microphone kit is a delight to build and use. No larger than a pack of cigarettes. Broadcast voice or music through any FM standard broadcast radio (or FM tuner, or car FM radio).

Broadcasts up to 50 feet, while walking about freely, unencumbered by any interconnecting wires. Transistorized circuit comprises both audio modulator and RF oscillator within the FM broadcast band (90 to 100 MHz).

Includes wire, solder, step-by-step instructions and wiring diagram with illustrations. Use 9-volt battery at left. 3½x2½x1". Shpg. wt., 1 lb.
22 A 3064..........................9.95

No larger than a pack of cigarettes

BOWMAN

HOBBY KITS

Color Organ Kit and Psychedelic Control Center for "lighter" music

Color Organ

39^{95} $5 monthly*

Control Center

12^{95}

PSYCHEDELIC CONTROL CENTER
COLOR INTENSITY
1000 WATTS CONTROLLED LIGHTS
MODEL PCC 10

"Display" music with this three-channel Color Organ Kit

Model CVA-3. Brighten your music with a three-dimensional colored diamond light show. This three-channel color organ will let you "see" music in three colors. Connects to any PA, phono or radio speaker in seconds. Just plug it in and turn yourself on. Three individual sensitivity controls allow you to vary each channel separately according to your own personal audio and visual requirements. Includes frequency crossover network at 2000, 5000, and 10,000 Hz so that each channel responds to different frequencies and sound levels for the input signal applied. Gives spectacular light display across the entire audio range. Has separate on/off switch. Solid-state circuit assures dependability. Special G.E. high-intensity red, blue, and green colored lights. Prismatic glass front. With oiled walnut wood cabinet. Size, 12x18x 9". For 110-130 volts, 60 Hz AC.
22 A 3282 X. Shpg. wt., 13 lbs. **39.95**

1000-watt Control Center Kit

Model PCC-10. Arrange your own specta
ular light display to accompany the har
rock sounds of your favorite music. Th
psychedelic control center handles up
1000 watts of any plugged in lights. Fee
in sound from any speaker and see mus
come to life. Has separate on/off switc
Sensitivity control lets you adjust th
color intensity as you wish. Reliab
solid-state dual silicon controlled rectifi
circuit. Size, 8x4x1½". For 110-130
60 Hz AC.
22 A 3283 X. Shpg. wt., 1 lb. **12.9**

A

24^{95} $5 monthly*

Craftint complete Art Supply Sets for budding artists

A **Acrylic Set.** Wooden box 13½x10" with handle contains ten 1x4" tubes of acrylic polymer colors, three 1 oz. jars of gloss, matte and gel mediums, one 1 oz. jar of acrylic remover, one 1½x6" tube of titanium white, four brushes, palette knife, palette, two 9x12" canvas panels. Plus three 12x16" canvas panels, book, and folding 18" aluminum table easel.
22 A 3277 X. Shpg. wt., 13 lbs. **24.95**

B **Oil Color Set.** Wooden box 9x12" contains seven 1x4" tubes of oil colors, large tube of titanium white, bottle linseed oil, bottle turpentine, 9x12" canvas panel, palette with cup and knife, 3 assorted brushes. Plus three 12x16" canvas panels, book, and folding aluminum table easel.
22 A 3278 X. Shpg. wt., 12 lbs. **24.95**

C **Water Color Set.** Contains 12-color pen set; 12 tubes (½x3¼") water colors, white enameled mixing pan, 2 brushes in cardboard box; water color pad 12x18", 3 extra brushes, book, folding table easel.
22 A 3279 X. Shpg. wt., 6 lbs. **15.95**

D **Drawing Set.** Contains 4-piece charcoal pencil assortment, 6-piece drawing pencil assortment, 24-color set of oil pastels, 6 oz. spray art fixture, kneaded eraser, charcoal pad 12x18", sketch pad 12x18", two books, and folding table easel.
22 A 3280 X. Shpg. wt., 7 lbs. **11.95**

B

24^{95} $5 monthly

C

15^{95}

OIL PASTELS

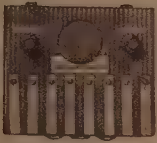
D

11^{95}

*No money down, low monthly payments . . details on page 43

Solid-state "Mod-U-Kits". . ideal for students and hobbyists

BOWMAN
HOBBY KITS



Light Sentry Kit

odel ALS-8. Turns your ghts on at dusk and also rves as a light beam alarm protect home from prowl-s. Photocell turns lights automatically. As Light ntry, anyone breaking ght-path from photocell ts off alarm signal heard rough any AC-powered M radio—just tune radio extreme high-frequency d of dial. 4x3x1⅞". 115 AC. Shpg. wt., 1 lb.
A 9544..................9.95

Electronic Organ Kit

Model EOA-3. Liven up parties or entertain family and friends at home with this low-cost electronic organ. As much fun to assemble as it is to play. Has treble/bass control, audio pitch control. Includes speaker. Sturdy polyethylene plastic case. Order 9-volt battery below. 2x5x4½". Shpg. wt., 10 [illegible]
22 A 3288..............6.95
18 A 5980. **9-volt Battery.** Wt., 6 oz........**Pkg. 2/59¢**

Mobile Amplifier Kit

Model MPA-5. Three-transistor power amplifier produces up to 5 watts power when used with a microphone. Driver section of the amplifier is placed on a special predrilled printed circuit board. Powered by 12 VDC auto battery, PS-12F (below), or any other 12-VDC source. Has separate volume and tone controls. Power cord fits auto cigarette lighter. 4x3x1⅞".
22 A 9539. Wt., 1 lb....8.95

Multiband Receiver Kit

Model MBR-4. Includes super amplifier kit, citizen's band tuning head kit, FM tuning head, and AM tuning head. Tuning heads are specially designed to be used with the amplifier. All you do is plug them into the amplifier input jack. Order 9-volt battery below. Compact size, each unit, 3x2x1¼". Shpg. wt., 10 oz.
22 A 3289..............14.95
18 A 5980. **9-volt Battery.** Wt., 6 oz..........**Pkg. 2/59¢**

Aircraft Receiver Kit

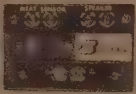
odel AIR-3. Covers 100-200 MHz for local HF aviation messages. 3-stage super-gh-gain amplifier; ferrite RF transform-; telescoping antenna. 3x2x1¼". With rphone. Order 9-volt battery below.
A 9537. Shpg. wt., 14 oz............5.95
A 5980. **9-V Battery.** 6 oz....**Pkg. 2/59¢**

AM Wireless Mike Kit

odel AMW-103. Broadcast your own ra-o programs with this basic transistor M transmitter. Has range up to 50 ft. ith mike, telescoping antenna. Order V battery below. 3x2x1¼".
A 3290. Shpg. wt., 5 oz..............7.95
A 5980. **Battery.** 6 oz........**Pkg. 2/59¢**

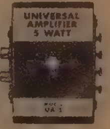
Fire Alarm Kit

odel FA-2. Two-transistor oscillator with ecial charging circuit for siren effect. ermostat makes contact when temper-ure reaches 130° F. Test button. Uses y speaker. 6-V batt. below. 2¾x2x¾".
A 9538. Shpg. wt., 14 oz............4.95
A 5085. **Battery.** Use 1. 1½ lbs. **Each 99¢**



5-watt monophonic Amplifier Kit

Model UA-5. General-purpose 3-transistor amplifier gives 5 watts music power. Accepts practically any pickup device. Imp., 3-16 ohms. Volume control. Order one 6-volt battery below. 3x2x1⅛".
22 A 9531. Wt., 5 oz..................5.9
18 A 5085. **6-V Battery.** 1½ lbs...**Each 99¢**



Proximity Switch Kit

Model PRS-100. Capacity switch. Use as alarm, night-light, etc. Also controls universal motor devices drawing current up to 5 amps. Capacity bridge network, SCR, transistor. For 110-130 V, 60 Hz AC. 4x3x1⅞". Shpg. wt., 8 oz.
22 A 9532..............................6.95

Super Sleuth Kit

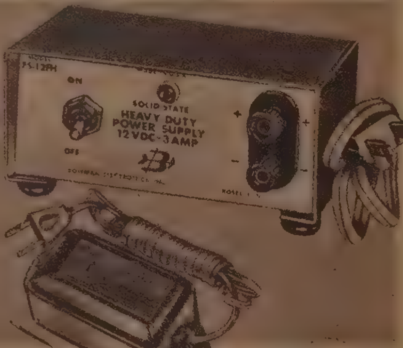
Model SS-100. 3-transistor direct-coupled amplifier. Use as hearing aid or private listening device. With crystal input mike, output earpiece. 3x2x1¼". Order 1.5-volt (AAA) penlight battery below.
22 A 9530. Shpg. wt., 5 oz..........5.95
18 A 5080. **Battery.** Wt., 2 oz...**Pkg. 2/26¢**

Ready-to-use 12-VDC Power Supply delivers 3 amps

odel PS-12FH. Fully assembled heavy-duty power supply can power most any tape player. Also can be used to power amplifiers and 3 units requiring high current with low-ripple DC. Suitable for od-U-Kit Mobile Amplifier. Supplies up to 3 amps of switching rrent. Features special dual high-capacity filtering. Has safety fuse, /off neon indicator. Rubber bumper feet will not mar or scratch. ith two-piece aluminum case. 2½x5x4". For 115 VAC.
A 3281 X. Shpg. wt., 4 lbs..............................24.95

Ready-to-use Universal 6-10 VDC Power Supply

odel PS-6F. Assembled power supply module. Supplies 6-10 VDC pending on current drawn. For tape recorders, amplifiers, radios, any other type of high gain device that requires pure DC. Suitable all Mod-U-Kits except Mobile Amplifier. Delivers up to 0.5 ps. Color-coded leads. 4½x2½x1½". For 115 VAC.
A 3688. Shpg. wt., 2 lbs...................................7.95



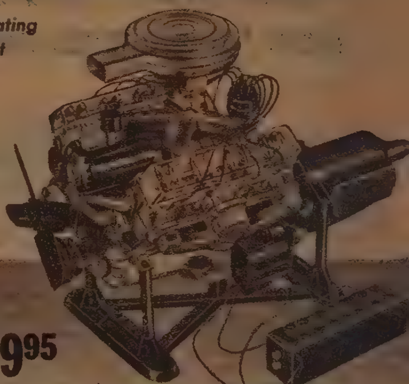
These Kits make learning *fun*

Many hours of fascinating and lasting excitement with these great kits

5⁹⁵

Monogram Transparent Phantom Mustang Kit

Authentically detailed 1/32 scale model of this famous WWII fighter plane. Has see-through fuselage and wings to show internal details. Two electric motors provide power for realistic working features—propeller spins, landing gear drops and retracts, bombs drop from wing mounts. Controlled by pushbuttons in mounting base. 144 plastic parts. 19¼x13¼x2¾". Order batteries below.
22 A 3656 X. Shpg. wt., 2 lbs. 5.95
18 A 5079. "D" Batteries. Uses 2. Wt., 5 oz. **Pkg. of 4 for 65¢**



9⁹⁵

Renwall Visible V-8 Engine Kit

Gives a good working knowledge of the V-8 engine. Pr cision molded parts are in four basic colors, includi "clear," so that actually functioning parts—pistons, co nector rods, rocker arms, properly timed spark plugs can be seen. Includes miniature electric motor, all necessa parts, plus informative instruction manual. Operates two "C" batteries, order below. 14½x10½x7¼".
22 A 9554 X. Shpg. wt., 5 lbs. . . . . .9.
18 A 5078. Batteries. Wt., 6 oz. . . . . **Pkg. of 2 for 3**

14⁸⁸

Nova Planetarium brings outer space to you

Shows more than 60 constellations as they are seen in the Northern Hemisphere, plus all major southern constellations. Has lighted pointer. Adjusts for any latitude north of the equator, any month of the year, any hour of the night. Built-in horizon maintains proper perspective regardless of latitude setting. Brightness control, star charts, instructions. 15x10x10". For 117 VAC.
22 A 3696 X. Shpg. wt., 4 lbs. . . .14.88

Blasts off to 1000 feet

13⁸⁸

Valkyrie Rocket Kit with liquid propellan

Blast off to 1000 feet with this e citing scale-model rocket kit wi fully realistic lift-off. Safe liqu propellant is flame and heat-fre non-toxic. Takes off at about 4 g accelerates to 10 g's at burnou Polished aluminum engine a parts, with working valves, sep rator, parachute.
22 A 3755. Wt., 2½ lbs. . . . . . .13.
22 A 3756. Extra Fuel. Shpg. w 8 oz. . . . . **Per Can 1.**

4⁹⁵

Digi-Comp 1 digital binary Computer

Look into the interesting world of the computer programer and operator with this operating desk-top computer kit. Programing this binary machine makes it easy to see the basic operating principles of larger computers. Performs all basic arithmetical operations, solves problems, processes data, does missile countdown and checkout, and more. With detailed, easy-to-follow instructions. 12" long, 5" high. Shpg. wt., 2 lbs.
22 A 3699 X. 4.95

Both Kits 5⁹⁵

The Beating Heart

Pumping and Beating Heart Kits

The aspiring doctor, nurse, medical technician or the high-school student will find these great kits fascinating as well as educational. Medically accurate, they show in great detail the beating and pumping actions of the heart. All parts are precision molded plastic with accurate anatomical shape and coloring. Visible pumping heart kit has red dye solution to show blood circulation. Complete with easy-to-follow instructions. Wt., 2½ lbs.
22 A 9598 X. . . . . **Both Kits for 5.95**

A

4⁸⁸

B

9⁹⁵

Renwall Visible Man, Visible Head

[A] Visible Man. Male anatomy in m nute detail. Transparent skin a musculature, natural color intern organs, separate 206-bone skeleto base, anatomy book. 16" high.
22 A 3698 X. Shpg. wt., 2½ lbs. . . .4.

[B] Visible Head. Displays the anatom of the human head with laborato clarity. Inner ear, eye, brain, spin cord, vertebrae, mouth, throat, mu cular structure.
22 A 3697 X. Shpg. wt., 5 lbs. . . . . .9.

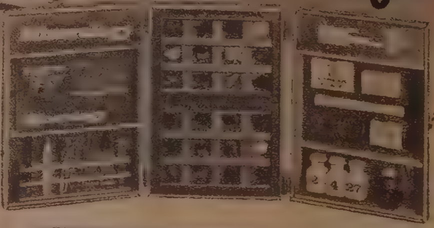
Let these kits introduce you to the wonderful world of scienc

Fascinating Educational Kits for budding mechanics and scientists

Ⓐ *File cards program over 700 experiments with this kit*

14.95 Complete chemistry laboratory kit

Ⓑ **9.95**



Ⓐ Gilbert deluxe graduate Chemistry Modulab Kit

›nduct experiments in chemical gardening; analytical testing; ermal chemistry; advanced chemical "magic"; chromatography; ›re—over 700 experiments in all. Includes six modular lab store racks; chemicals and supplies; precise lab scale; mortar and stle; hydroponic tray; alcohol lamp; test tubes; file cards for periments. With detailed instructions.

A 3670 X. Shpg. wt., 15 lbs. 14.95

Ⓑ Porter deluxe mineralogy-senior Laboratory Kit

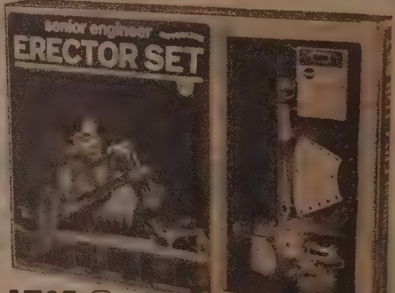
cludes full complement of scientific instruments for determining ›neral types; geologist's hammer for unearthing specimens; ıgnifier for examining crystalline structure and particles of rious minerals. With 24 mineral specimens; alcohol lamp with ›w-torch attachment; test papers and chemicals; test-tube rack; eak plate. Descriptive instruction manual and wall-size identifition chart. Three-panel metal case.

A 3669 X. Shpg. wt., 5½ lbs. 9.95

Ⓒ Gilbert senior engineer Erector Set

ıis is "heaven" for the engineering-oriented youngster. Complete sortment of steel girders, plates, curved sections for hundreds of ›jects. Plans for helicopter, oil rig, lift bridge, shipbuilding ane, more. Power-Matic motor with three takeoffs; Power-Matic ist for powering two different operations, with shift control; ttery case for start, stop; forward and reverse remote-control. der batteries below.

A 3663 X. Shpg. wt., 8 lbs. 15.95
A 5079. "D" Batteries. Use 2. Wt., 5 oz. . . . . . . Pkg. of 4 for 65¢



15.95 Ⓒ

›relco deluxe echanical Kit ith 40 projects

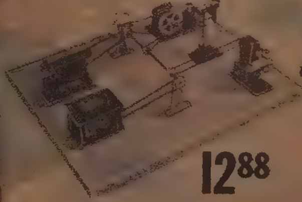
27.95
$5 monthly*

›ntains over ›0 parts for ›ide range experiments

Norelco Mechanical Engineer

›del ME-1200. Over 40 operating projects plus ıny more special experiments. Lets children see in ›ion the various power sources we use every day. ›er 600 parts for experiments with electricity, air d water pressure, gears and gravity. Unbreakable ıstic parts are easy to identify and assemble. 136-ge manual with easy-to-follow diagrams for simfied assembly. Order one battery below.

A 3661 X. Shpg. wt., 6½ lbs. 27.95
A 5102. Battery. Shpg. wt., 8 oz. 1.36

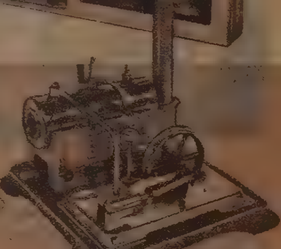


12.88

Miniature Machine Shop

Perfect little machine shop can be operated with steam engine at right. Consists of shaper, saw, forging hammer, drill press, and milling machine connected by belts to a line shaft. Machines move like those in large machine shop. Red enamel with gold trim. 11½x14" wood base. 5" high.

22 A 3437. Wt., 6 lbs. 12.88



12.88

Dry-fuel fired Steam Engine

Nickel-plated brass boiler with double-action slide-valve type cylinder, safety valve, whistle, gauge glass. 3" flywheel, power take-off pulley, throttle valve, rotating governor. Reversible. Four fuel tablets. Size, 8½x8¾x9¼". Shpg. wt., 4 lbs.

22 A 3438. . . . . 12.88
22 A 3439. Extra Fuel Tablets. Wt., 6 oz. . . . . Pkg. of 20 for 49¢

Develop and enlarge your own photos with this complete Darkroom Kit

12^{95} *Lets you develop and print your own black-and-white photos . . even has quality 35mm enlarger for excellent prints up to 8x10"*

Great value for shutterbugs, hobbyists, beginners, candi
cameramen. Money-saving Photography Lab Kit contain
everything you need to develop and print your own black
and-white photos with excellent quality. Makes it easy an
fun to set up your own darkroom. Includes a versatile 3
mm Horizontal-Type Enlarger with twin condensing lense
and 3" focal length projection lens. Produces quality en
largements up to 8x10". Contact Print Frame takes nega
tives up to 3½x4¼", turns out bright and clear standar
size prints. Also contains Three Plastic Developing Tray
Tray Thermometer, Developing Chemicals, Film Clip
Neon Safelight, Printing and Enlarging Paper, Darkroo
Handbook with full instructions for each processing ste
22 A 9522 X. Shpg. wt., 4 lbs. 12.9

Weather Station Kit

8^{88} *Make your own weather forecasts*

Exciting weather station kit lets you measure wind speed and direction; record relative humidity; check rainfall to 1/100th of an inch. You build 4 professional-type instruments: Remote-reading Anemometer and Wind Vane; Air-Tank Barometer with 4-ft. indicator column; Sling Psychrometer; Rain Gauge with calibrated scale tube. Flashing indicator lights show wind speed and direction on indoor board. Safety power cord limits current—all electrical connections are safe to touch. With all parts, 150-ft. lead-in wire; weather map, cloud chart, full instructions. 115 VAC.
22 A 9514. Wt., 2 lbs. 8.88

Exciting Analog Computer Kit 6^{95}

Fascinating analog computer kit, great for students, hobbyists and mathematicians. Fast and accurate, it helps you perform lengthy and complicated math problems you'd never tackle with a pencil. No need for extensive mathematical knowledge. Fun-to-build too. 10x5¾x2¾".
22 A 3291. Wt., 1 lb. 6.95

Atomic Energy Lab Kit

7^{95}

Modern, space-age kit lets you study nuclear physics with completely *safe* radioactive materials. You get: Atomic Cloud Chamber; Spinthariscope; and Electroscope. Track particles, measure changes in nuclear structure; test radiation of samples, much more. With detailed instructions for all experiments. Wt., 3 lbs.
22 A 9523. . . . . 7.95

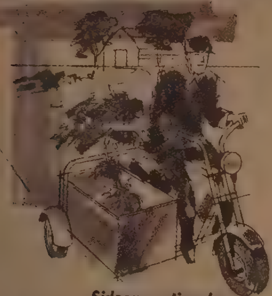
Fun-filled Electronics Laboratory Kit 9^{95}

Educational and informative, this de
luxe electronics lab kit lets you pe
form exciting experiments. Exper
ment with AC and DC current, stat
electricity, inductance and reactanc
much more. Includes all parts, pl
accessories for fun-filled experiment
Full instructions. For 115 VAC.
22 A 3292. Wt., 3 lbs. 9.9

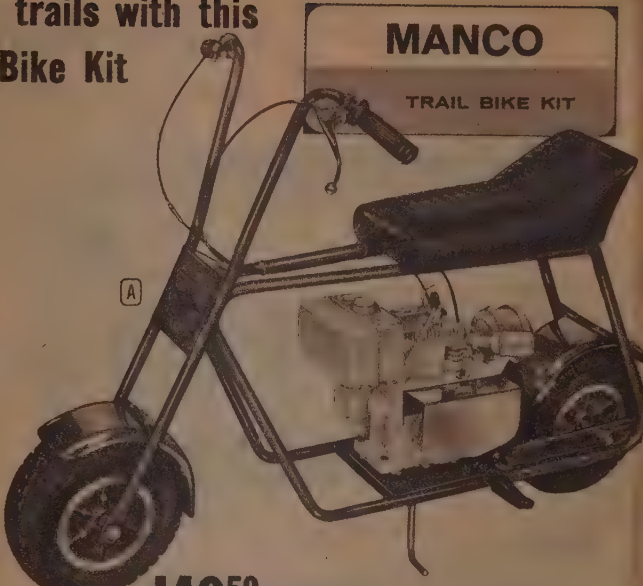
11^{95} Photomicrography Kit

Includes micro-camera, projector an
microscope for making photographs
slide specimens. Provides a magnifie
image of the miscroscopic subject u
to 99X, which can be then develope
and printed. Can be used with bo
black-and-white or color film. Wi
full instructions, details for excitin
projects. For 115 VAC.
22 A 3293. Wt., 4 lbs. 11.9

Explore backwoods trails with this go-anywhere Trail Bike Kit

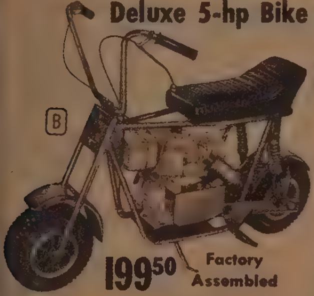


Sidecar optional



149.50 *Compare! There's no better value in a 3½-hp bike*

Deluxe 5-hp Bike



199.50 Factory Assembled

A Built to go *anywhere*. Explore backwoods trails, deserted dunes or beaches, gravel roads, or anyplace off the beaten path. Lauson 3½-hp engine zips you along at up to 30 mph. Four-cycle engine requires no mixing of gas and oil. Pneumatic (air filled) 4.10/3.50x6 knobby tires give you good traction over almost any terrain. Heavy-duty double-loop tubular frame shrugs off brutal punishment. Comfortable foam saddle with vinyl cover. Ball-bearing steering. Adjustable hand brake with handlebar control. Automatic centrifugal clutch, chain drive with safety cover. Convenient recoil starter. 5:1 gearing. Finished in high-gloss enamel, with chrome-plated fenders. 34x21½x51" long. Ground clearance, 4½". Curb weight, 78 lbs. Shpg. wt., 85 lbs. See Note below.
22 A 3647 ZF....................149.50
22 A 3648 ZF. Factory Assembled. Shpg. wt., 85 lbs..............169.50

B **Deluxe 5-hp Model.** Has same fine features as above, but extra-powerful 5-hp engine, *plus* front and rear shock absorbers, internal expanding rear wheel brake. Special "Swing Arm" spring suspension rear wheel. Chrome plated handlebars. 37" wheel base. Overall, 37½x28x49".
22 A 3644 ZF. Factory Assembled. Shpg. wt., 112 lbs..............199.50

Custom Trail Bike Accessories for added versatility

12.95

Sealed beam Headlight Kit

werful headlight shows e way at night. Assembles sily, mounts in hole in nt of bike. With battery x for 6-volt lantern bat- y. Order battery below. pg. wt., 2 lbs.
A 3649 F..........12.95
A 5085. 6-volt Lantern Bat- y. Wt., 1½ lbs..........99¢

7.95

Custom Windshield

Custom-designed trail bike windshield is made of strong, clear acrylic plastic. Protects you from bugs, dust, etc. Attaches firmly to handle bars. May be installed or removed easily. Size, 12x17½" high. With hardware. Shpg. wt., 2 lbs.
22 A 3645 F..........7.95

49.95

Two-speed Drive Kit doubles torque

Shiftable hi/lo speed drive provides a 2:1 gear reduction for easier going on extra rough terrain. Shift control mounts on handle bar . . . lets you instantly change from standard 5:1 gear ratio to 10:1 ratio. Installs easily. 8 lbs.
22 A 3739 F..........49.95

48.95

Sidecar Kit adds utility

Add extra versatility to your trail bike with this bolt-on sidecar. Plenty of carrying space. Tubular-frame with heavy-gauge steel sides. Single wheel. Easily attached or removed from trail bike. 10x13x28" long. Shpg. wt., 40 lbs.
22 A 3740 UF..........48.95

OTE: Use of trail bikes on streets, or public highways is prohibited by law. All items this page shipped from Fort Wayne, Ind. Allow 2-3 weeks for delivery. Trail Bikes, Side Car sent frt. or exp.

HOBBY
AQUARIUM OUTFITS

Complete Aquarium Outfits get you started in a fascinating new hobby

DYNAFLO MOTOR FILTER
CHARCOAL
GLASS WOOL

Dynaflow motor filter, heater with thermostat, thermometer, charcoal and glass wool, anti-chlorine crystals, fish food and handy aquarium manual

29^{95}

$5 monthly*

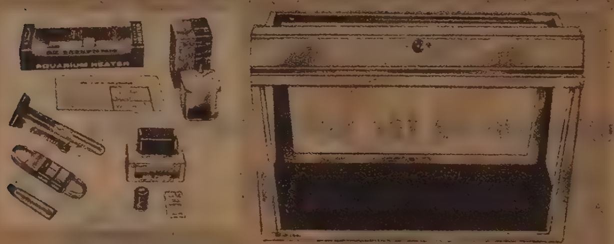
Deluxe 10-gallon Outfit with Stow-a-lite cover

Everything you need for getting started one of the world's most interesting hobbie All you add is water and a selection of tropic fish. Makes an exotic and fascinating adc tion to any room decor.

Heavy-duty tank features stainless ste frame and polished glass. Special stow-a-li aquarium light completely covers tank top keep dirt out and minimize water evapor tion. Sockets for two 25-W bulbs (not i cluded) to bring out the colorful beauty fish and aid plant growth. Reflector cover h convenient hidden storage compartment f fish food, net, accessories. Hinged for ea access. Dynaflow motor filter with sile magic-magnet drive aerates water as it filter keeps fish healthy and lively.

Outfit includes: 50-W heater with automat thermostat, thermometer, charcoal and gla wool for filter, anti-chlorine crystals, fi food, aquarium manual. Tank, 12x20x10 Light, filter and heater for 117 VAC. Shp wt.. 25 lbs.

22 A 3620 U..............................29.
22 A 3641 U. 20-Gal. Outfit. 55 lbs.......44.



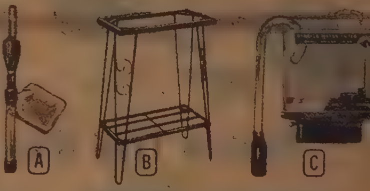
Budget-priced 10-gallon Aquarium Outfit

19^{95} $5 monthly*

- Stainless-steel tank has polished glass sides
- Powerful air pump for corner filter/aerator
- Stainless-steel reflector for aquarium lights

Complete 10-gallon aquarium outfit is a great value for everyone! Provides countless interest-filled hours. Features a built-to-last stainless steel tank with polished, distortion-free glass sides. Rugged vibrator-type air pump powers the filter/aerator. Keeps water clean and fresh. Stainless-steel reflector has sockets for two bulbs (not included). Outfit includes: 50-watt heater with automatic thermostat, thermometer, airline tubing, charcoal and glass wool for filter, chlorine neutralizer, fish food, aquarium handbook. Tank, 12x20x10". Light, air pump and heater for 110-120 volt, 60 Hz AC.

22 A 3642 U. Shpg. wt., 23 lbs..............................19.95



AQUARIUM ACCESSORIES

A **Aqua-Vac Aquarium Cleaner.** Cleaner pic up dirt your filter misses. Cleans grav surface and imbedded dirt. With extensio tube for deep tanks, disposable bag, instru tions. Order 2 batteries sold below.

22 A 3622 X. Shpg. wt., 1 lb..................4.
18 A 5078. "C" Batteries. 4 oz.........2 for 3

B **Wrought Iron Aquarium Stand.** For 1 gallon tanks. Black finish. 30" high.

22 A 3621 X. Shpg. wt., 21 lbs...............8.
22 A 3643 X. 20-Gal. 30" high. 23 lbs.......9.

C **Dynaflow Heavy-Duty Filter.** Silent "magi magnet" motor circulates 1000 gallo of water daily. Filtration and aeration keep water clear, fish healthy. 117 VAC.

22 A 3623 X. Shpg. wt., 3½ lbs.............10.

*See page 438 for full Credit detai

N-Gauge Bookshelf Railroads.. world's smallest train outfits!

Precision engineered to 1/160 scale

Deluxe Railroad Outfit with 45"x27" layout

ne real thing in miniature.. master-crafted, fully detailed. ombination freight and passenger railroad set you'll be oud to own and display. Powerful Alco diesel locomotive ills 4 freight cars, 3 streamline passenger cars over big, noramic layout. Cars feature automatic coupling. Full "x27" layout board is realistically painted and flocked; ack and switches mounted. U.L. listed power pack with cessory outlets, car railer. Building kit and trees included. r 117 VAC.
A 3433 U. Shpg. wt., 17 lbs.....................49.95

49.95
$5 monthly*

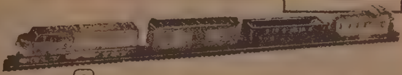
23.95
5 monthly*

16.95

Power pack

32.95
$5 monthly*

With oval track



Diesel with Freight Cars

ecision-made set to please the rail . Alco diesel pulls 8 deluxe freight s including Santa Fe, Republic, igh Valley. Features automatic pling over 17x24" track layout. alistic outfit. U.L. listed power pack h accessory outlets. Car railer to cars on track. 117 VAC.
A 3434 X. Wt., 3½ lbs.........23.95

B Steam Locomotive Outfit

Big Pacific 4-6-2 steam locomotive has headlight and tender. With 5 colorful freight cars: stock car, flat car with load, tank car, hopper car, caboose. Puffs around 17"x24" layout. U.L. listed power pack. Nickel plated oval track. Car railer to put cars on track. 117 VAC.
22 A 3435 X. Wt., 3½ lbs.........32.95

C Low-priced Diesel Outfit

Life-like Alco diesel freight outfit featuring powerful gear drive locomotive and 3 authentically detailed freight cars; automatic coupling. Speeds around big 16"x24" oval track. U.L. listed power pack has accessory outlets. Includes car railer to put car on track anywhere. For 117 VAC.
22 A 3436 X. Wt., 3½ lbs.........16.95

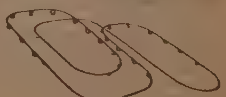
Quality Cars, Engines, Switches

Pacific steam Locomotive and Tender. Modeled from USFA 4-6-2 prototype. Precisely ailed with spoked drivers, operating valve r, headlight. Painted and lettered after the ginal engine. Wt., ½ lb.
A 3425.......................21.95

Set of 4 Freight Cars. Exact replicas of American prototype freight cars. Each has y automatic coupling. Authentically nted and lettered. Make a handsome addi- to your collection. Wt., ½ lb.
A 3426.......................Set of 4 for 4.95

Pair of Electric Switches. One left-hand and one right-hand. Use for adding freight d, additional spurs, etc. to layout.
A 3427. Shpg. wt., ½ lb..........Pair 7.95

Giant 52-pc. Track and Trestle Extender Pack



9.95

Create your own miniature railroad empire with this giant 52-piece track and trestle extender pack. Assembles to a full 48"x60½". Includes 8 sections of curved track and 18 sections of straight track, plus ½ section straight track and 2 pier sets (24 pieces). Shpg. wt., 2 lbs.
22 A 3428.......................9.95

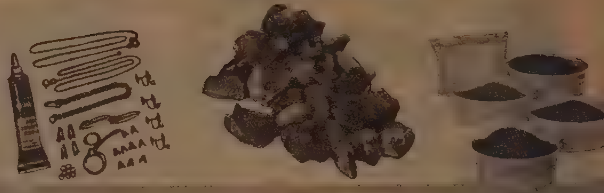
ee page 438 for full Credit details

Lapidary Outfits and Supplies for hobby fun or part-time profit

from CRAFTOOL

All you need to transform rough stones into beautiful pieces of gem stone jewelry

23^{95}

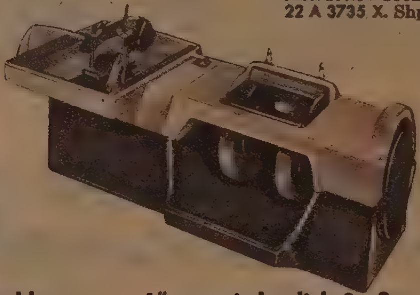


Gem Stone/Tumbling and Jewelry Making Ki

Enjoy the fascination of transforming a rough stone in a beautifully polished gem stone for mounting in earring cuff links or other pieces of jewelry to wear yourself or really special gifts. Complete tumbling and jewelry maki kit provides a marvelous introduction to the lapidar craft of gem polishing. Includes: mini-tumbler with dr and liner, powerful self-contained motor, assortment rough cut gem stones, assorted jewelry mountings, grades of abrasive grits, polishing medium, jewelry gl instruction booklet. 117 VAC.
22 A 3735 X. Shpg. wt., 12 lbs.......................23.

Compact 6-pound Tumbler

Ruggedly designed cast aluminum and formed Kydex tumbler has a 4½x9½" dia. hexagonal drum. Up to 6-lb. capacity. Lined with strong, noise-deadening neoprene gasket. Quiet, extra-long nylon bearings. Fan-cooled motor. 11¾x11x9". 117 VAC.
22 A 3776 XF. *Shpg. wt., 19 lbs. 34.95



6" cut-grind-polish Outfit

Has 6" diamond sawblade, two 6x1" grinding wheels, recessed sanding/polishing disc. Lexan shields. Coolant flow adjustment, well drains. With set of sanding discs, cement, instructions. Uses motor at right; extra 6" saw blades below. 9x10x26".
22 A 3777 UF. *Shpg. wt., 53 lbs. 129.50

10" Lapidary Trim Saw

Takes up to 10" blade. Saw guard wi transparent shield, coolant hose co nection, 13x18" table, adjustable ro vise. Less motor (below), and sa blade (Fig. A, below). 12x13x18".
22 A 3778 UF. *Wt., 43 lbs......69.
22 A 3779 XF. AC Motor. For above a 6" outfit. *Wt., 13 lbs..........28.

A **10" Diamond Saw Blade.** Specially designed for rock cutting. Can be operated in either direction to equalize rim wear and get maximum use from every blade. Hand tensioned to remove wobble and flutter for true running at rated speed. 10x.040".
22 A 3741. Shpg. wt., 2 lbs......22.45

B **22 A 3742. 6" Blade.** Same as above, but 6x.025". Wt., 1 lb.........13.50

C **Tumbling Abrasives.** Four packages of silicon carbide tumbling abrasive, from coarse to polish; coarse, medium, fine, polish.
22 A 3743. Shpg. wt., 3 lbs.......3.50

D **19-Piece Dopping Set.** All you need to facilitate final polishing of gem stones. Includes: alcohol lamp, 4 pieces of dopping wax, 12 dop sticks, 2 metal dops, instructions.
22 A 3744. Shpg. wt., 2 lbs.......4.95

E **Rough Tumbled Stones.** Approximately 200 pieces, including a variety of agate and rose quartz, tiger eye, jasper, and many others.
22 A 3745. Shpg. wt., 2½ lbs.....5.50
22 A 3746. 3-lb. Quartz Assortment. Colored and clear pieces. 4 lbs.......5.50
22 A 3747. 3-lb. Banded Agate Assortment. Light and dark banded. 4 lbs. 5.50

F **Jewelry, Gem Cutting and Metalcra** William T. Baxter. Detailed i structions covering all phases jewelry making, metalcraft. 334 p
22 A 3785 E. Shpg. wt., 1 lb.......7.

G **Hand-Made Jewelry Booklet.** A. Emerson. Introduction to produ ing simple hand-made jewelry. 83 p
22 A 3786 E. Shpg. wt., 8 oz.......1.

H **Findings Kit.** Mounts for polish stones. Includes: 2 sets of earri mounts, cuff links, tie bar, key ri finger ring, chain pendant, w bracelet, jewelry cement.
22 A 3787. Shpg. wt., 1 lb.........2.

**Shipped truck or express from Wood-Ridge New Jers*

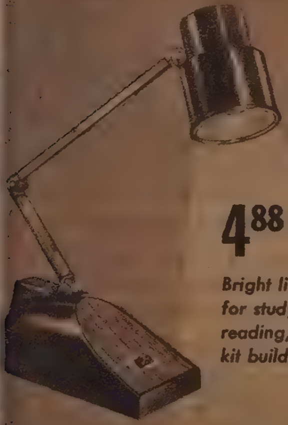
You'll enjoy savings, satisfaction ınd fun when assembling a Hobby Kit

Easy-to-assemble full-feature AM Table Radio with superhet circuit

9.95

It's more fun to hear your favorite AM programs loud and clear on a radio you've built yourself

re's an AM table radio kit that's just right
beginning hobbyists and experimenters. Low-
ced, educational and instructive, it lets you
perience the thrill of hearing all your favorite
M radio programs loud and clear on a radio
've built yourself. Covers standard 540-1600
z AM radio broadcast band. Sensitive super-
erodyne receiver circuit picks up plenty of
tions. Special Automatic Volume Control
VC) circuit provides steady sound, even when
eiving stations of widely varying signal
ength. Ferrite-core antenna provides in-
ased sensitivity. Circuit has four tubes, plus
tifier. Handsome ivory plastic case blends
ll with any decor. Overall size, 5¼x7¾x4".
tailed assembly manual has easy-to-follow
p-by-step instructions and illustrations with
rsize diagrams. Complete, with all parts,
es and rectifier, solder, precut wire. For 110-
volts, AC or DC. From Japan. Shpg. wt.,
s.
A 9524.....9.95



4.88

Bright light for studying, reading, hobby-kit building

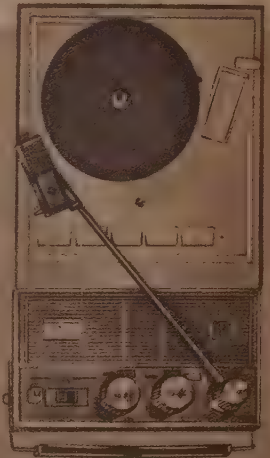
Universal high-intensity Lamp Kit

rovides bright, clear light when and where
ou need it. Non-glaring light is equivalent to
50-watt incandescent bulb. Folding arm for
ompact storage. Hi/Low/Off switch lets you
elect just the light you need. Handsome mar-
roof wood-grain finish; double shade; deluxe
osewood inlay base for a real decorator's touch.
eige color. With easy-to-follow instructions for
ast, fun assembly. With one #93 bulb; order
xtra bulbs below. For 115 VAC.
2 A 9501. Shpg. wt., 2 lbs.....4.88
6 A 3147. Extra #93 Bulbs. 2 oz.....Pkg. of 2 for 49¢

Great outdoor entertainment at the beach or on picnics

19.95

Portable plays 33⅓ and 45-rpm records



Battery-powered Phonograph Kit

Manually-operated portable phonograph is great at the beach, picnics or any type of party. Plays up to 12" records at 33⅓ or 45-rpm. Has built-in speaker, volume control, lightweight tone arm with crystal cartridge. Push-pull output circuit. Housed in sturdy plastic case, with removable cover. Compact, 2½x5½x 9¾". Operates on 4 "C" batteries. With all parts, solder, batteries, strobe disc and 45-rpm adapter. Extra batteries below.

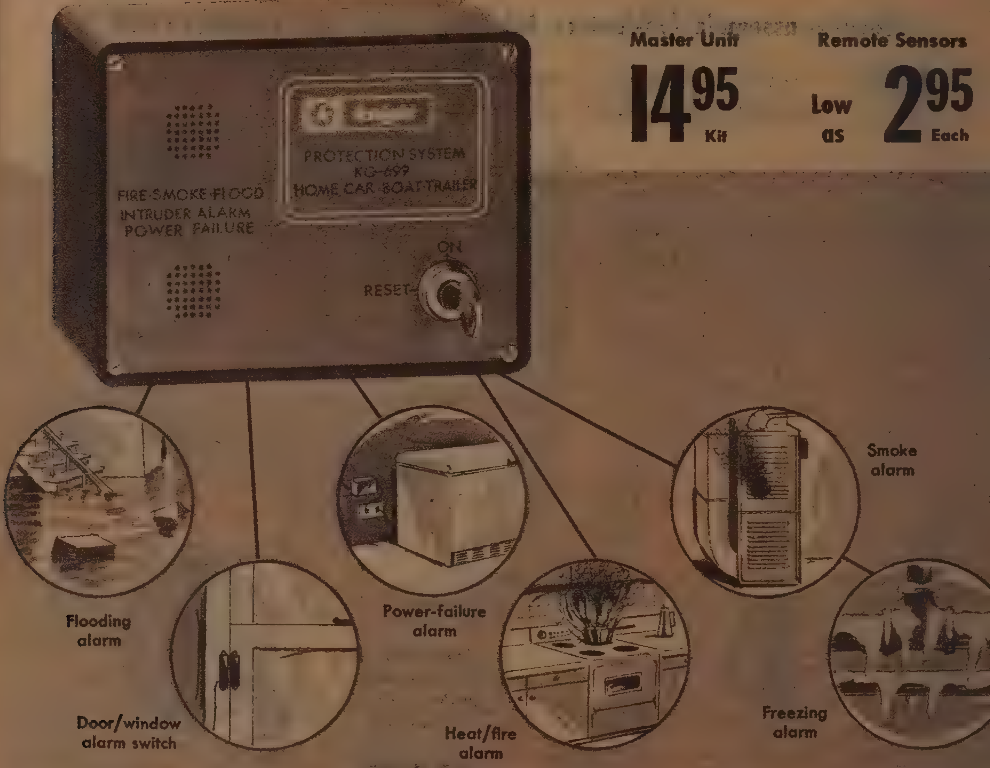
22 A 9520 X. Shpg. wt., 3 lbs.....19.95
18 A 5865. Extra "C" Batteries. Use 4 with above. Shpg. wt., 4 oz.....Package of 2 for 33¢

knight-kit
ALARM SYSTEMS

Home Protection System Kit and Remote Sensors

Master Unit 14.95 Kit

Remote Sensors Low as 2.95 Each



Solid-state Alarm System protects your home, family and possessions

- Loud alarm horn can be heard up to 100 ft.
- "Fail-safe"—any break in system starts alarm
- Key switch control . . only you can activate system
- Master unit accepts up to three remote sensors
- Assembles quickly with screwdriver and pliers
- Battery-operated for use anywhere

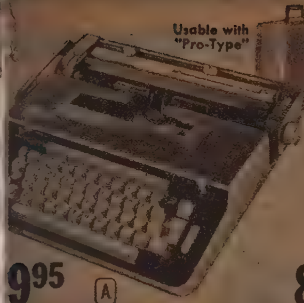
Now you can give your home, family and possessions *complete* protection from fire, theft, flooding, smoke, power failures, and freezing with this solid-state alarm system. Actuation of any remote sensor produces a loud audible warning that can be heard up to 100 feet. Gives you an instant warning so quick corrective action may be taken. Battery operation makes system ideal for boats, cars or airplanes.

Battery-operated master accepts up to three sensors (order at right), operates up to one year on two "D" batteries. Door-window magnetic switches signal opening of door or window. Smoke alarm signals presence of smoke in air duct. Heat/fire alarm gives immediate signal of fire. Freezing alarm signals when temperature falls below 32°F, while flood alarm signals water in basement or boat. Power failure alarm warns you immediately of power loss in any desired part of your home. Automobile alarm protects against theft or vandalism, with a loud horn warning.

Built-in "failsafe" sounds alarm automatically for break anywhere in the system to assure you of constant protection once system is activated. Tumbler type key switch control prevents anyone but you from turning system on or off. 5¼x7x2½". Master unit kit includes keylock switch, siren, control components, case, instructions. Each independent sensor is assembled, with 6-ft. cord and pin plug. To run longer cord to Master Unit, order audio cable with pin plug on one end, pin jack on other (p. 354), or splice in lamp cord.

22 A 3339 X. Master Unit Kit. Wt., 3 lbs.	14.95
22 A 3299 X. Master Unit Wired. Wt., 3 lbs.	19.95
22 A 3340. Door/Window Magnetic Switch. 8 oz.	2.95
22 A 3341. Smoke Sensor. 117 VAC. Wt., 3 lbs.	9.95
22 A 3342. Heat/Fire Sensor. Wt., 1 lb.	2.95
22 A 3343. Freezing Sensor. Wt., 1 lb.	3.95
22 A 3344. Flood Sensor. Wt., 1 lb.	5.95
22 A 3345. Power Failure Sensor. Wt., 1 lb.	2.95
22 A 3346. Automobile Alarm Kit. 3 lbs.	8.95
18 A 5079. "D" Battery. Master uses 2. Wt., 8 oz.	4/65¢

Protect your home with a low-cost alarm system from Alli



Usable with "Pro-Type"
89⁹⁵
B

alues in Business Machines

A Deluxe Electric Typewriter

ther 1220. Has correction key to ust spacing errors, and for perfect ht-hand margins. Tab set, clear; tant-set margins. 6-position spac-, half-spacing. 88-character keyard. Adjustable touch control; y control regulates typing speed, nber of copies. Card holder. Steel. a type. With case. 6x14x15½". VAC. Japan.
A 5109 U. Wt., 40 lbs......139.95

B Heavy-duty Portable

Features segment shift, comfort-sloped 88-character keyboard, clear-view paper meter, scale. Pushbutton key-set tab, ribbon key. Jam-release key, variable line spacer, rapid paper advance, line finder. Molded case. Steel. 7¾x18x16¾". From Japan. Shpg. wt., 23 lbs.
10 A 4308 X. Elite Type........89.95
10 A 4309 X. Pica Type..........89.95
10 A 4310 X. Script Type.........89.95

Pro-Type" customizes typewriters (A), (B) above to your profession

(A), (B) *only*. "Pro-Type" cylin- slips-on special typewriter key. pist selects any of 12 symbols to used. Japan. 6 oz. (Not shown.)
A 5111 S. International Language.
¿ ¡ ´ ¨ ~, etc..............9.95

10 A 5112 S. Medical/Pharmacy.
Pt m Ph ℞ fl ʒ, etc.........9.95
10 A 5113 S. Engineering.
α Ω [ ] φ °, etc............9.95
10 A 5110 S. Mathematics.
÷ ± Σ ∞ π √, etc.......9.95

C Student budget special

l 88-character keyboard. Has 2- spacing; half-space ratchet for mula typing. Eraser table, card der, paper scale, hand-set mar-. Two-color adjustment, stencil ition. Jam release, touch adjust-nt. Pica type. With case. Steel. x11½x15". Japan.
A 4306 X. Wt., 15 lbs........49.95
A 4982 X. As above, but 84-charers, clamp-on lid. 12 lbs....44.95

E Portable Electric Adder

mpact adder for home or small ce. Adds, subtracts, multiplies, es total and sub-total. Lists to 7 umns, totals to 8 columns 9,999.99). Repeat key, correction er, column indicator. All metal, -cast. Retractable handle. 4½x x12½". Triple-purpose carry case, t cover. 117 VAC. U.L. Listed. es standard tape. 16 lbs. Japan.
A 5044 X......................79.95

Home/office Electric Stapler

imate in automatic stapling. y to load, takes standard staples. ietly, uniformly staples different knesses of paper. Gauge to set ple where you want it. Features omatic shut-off for safety. Mod- styling in molded high-impact stic. 3-bottom suction cups. Size, x3¼x6½". 117 VAC. From Ja-. Shpg. wt., 3 lbs.
A 5114 S......................29.95

D Full-feature economy model

Includes features of costlier portables. Has automatic key-set tab. Comfort-sloped 88-character keyboard with clear-view paper meter and scale. Touch selector, jam-release key. 1, 1½ and 2-line spacing plus half-spacer for formulas. Two-color ribbon, stencil selector. All steel. Pica type. Carry case. 8x18x16". From Japan.
10 A 4311 X. Wt., 19 lbs........69.95

F SCM deluxe Electric Adder

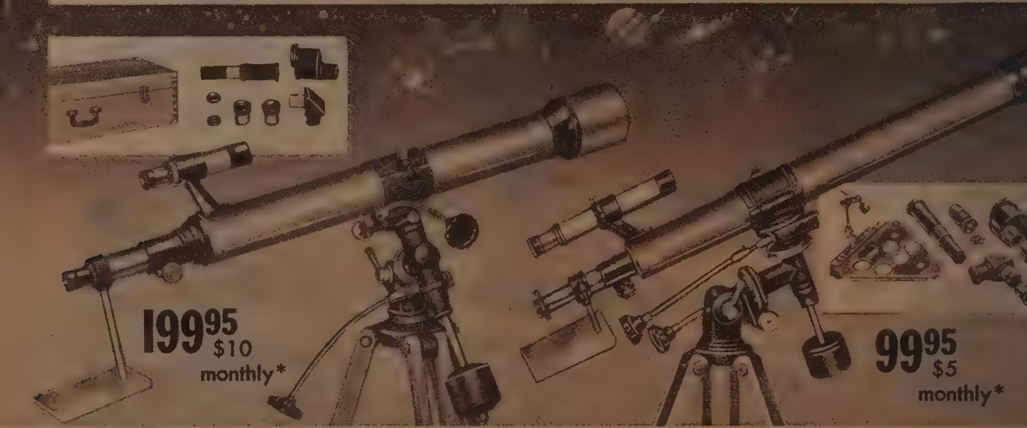
Adds, subtracts, multiplies 8 columns (999,999.99), totals 9 columns (9,999,999.99). Fast response; correction key; simplified tape-feed. Repeat, sub-total keys. Steel case. 5¾x8x12". 117 VAC. U.L. Listed.
10 A 4787 X. Wt., 14½ lbs....109.95
10 A 4305 X. SCM Home Adder (not shown). Adds 7 columns, totals 8. Lightweight. Snap-on cover. 7x9x13". 117 VAC. 10½ lbs.........69.95

H Electric Pencil Sharpener

Great convenience for home or office. Safe enough for a child to use. Simply insert any standard pencil. Stops automatically when pencil is sharp. Heavy-duty motor, precision-ground cutter and die-cast metal construction. Transparent shaving receptacle slides out easily for quick, neat cleaning. 8x4x8". 117 VAC. U.L. Listed. Japan.
10 A 4353 S. Wt., 3¾ lbs......13.95

Vinyl-Clad Steel Case
109⁹⁵
F

Telescopes, Outfits and high-power Binocula



199^{95} $10 monthly*

99^{95} $5 monthly*

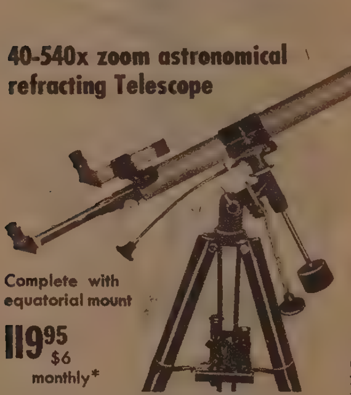
Our best Telescope Outfit—600 power

Our most powerful astronomical and terrestrial refracting telescope. Lets you see stellar objects as faint as 11.2 magnitude. Boasts giant 76mm (3″) achromatic Fraunhofer type objective lens and five separate eyepieces for magnifications of 54.5x, 96x, 133.3x, 200x, and 300x. 2x Barlow lens, also included, doubles each power for magnifications up to 600x. Outfit also includes erecting prism for terrestrial viewing and diagonal prism for right angle viewing. Projection screen and filter for safe viewing of solar flares, sun spots. Moon filter and 6x30 finder scope. Rack and pinion focus. Counterbalanced equatorial mount has slow motion controls, holds illuminated parts tray. With carrying case, instruction book. From Japan.
10 A 5128 U. Shpg. wt., 50 lbs.....................199.95

450-power astronomical Telescope Out

Track man-made satellites, see Saturn's rings on a c
night. Achromatic, coated 60mm objective lens with t
separate eyepieces—46x, 152x, and 227x, plus Barlow
lens to double each power. Diagonal prism for right a
viewing. Erecting prism for terrestrial viewing. Projec
screen and filter for observing sun. Moon filter and 6
finder scope with cross hairs. Counter balanced 3-
(polar, horizontal and declination) equatorial/altazim
mount. Slow motion cable controls. Rack and pinion fo
900mm focal length. Illuminated metal parts tray. F
foot wood extension tripod. Scope has gray metal b
chromed attachments. Length: open, 38½″; closed, 32
Hardwood case, instructions. Japan.
10 A 4383 U. Shpg. wt., 31 lbs..........................9

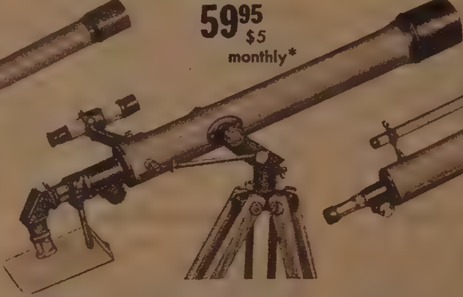
40-540x zoom astronomical refracting Telescope



Complete with equatorial mount

119^{95} $6 monthly*

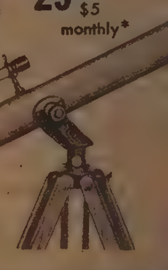
This astronomical and terrestrial refractor boasts Fraunhofer-type objective lens with 60mm diameter, 900 mm focal length. 7.5mm-22.5mm zoom eyepiece and 5mm auxiliary eyepiece give 40-540 power. 6x30 right angle finder scope plus 3x Barlow lens, image erector, moon filter and diagonal prism. Equatorial mount has slow motion controls for horizontal, polar and declination axis. Azimuth, hour, declination circles. Group viewing screen. 5′ adjustable tripod with illuminated parts tray. 30″ long. Japan.
10 A 5129 U. Wt., 34 lbs..........119.95



59^{95} $5 monthly*

350-power Telescope Outfit

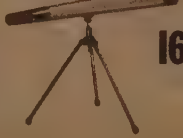
Bring the stars and planets 350 times closer with this powerful 60mm astronomical refractor. Features three eyepieces and 2x Barlow lens for 35x, 70x, 117x, 175x, 234x, and 350x magnifications. Also has sun filter, moon filter, projection screen, 5x24 finder scope, star diagonal, erecting prism. 700mm focal length. 5-foot tripod; altazimuth mount. Illuminated parts tray. Instructions. Japan.
10 A 4196 U. Wt., 25 lbs..........59.95



29^{95} $5 monthly*

90-power Terrestrial Telesc

15x low power permits close exam
tion of a wide field while 90x g
you a closer look at far away objec
plus three other magnifications
astronomical or terrestrial use. H
coated 60mm objective lens, si
eyepiece with 15x, 30x, 45x, 50x,
90x settings. 550mm focal length.
cision crosshair finder. 5-foot adj
able tripod with altazimuth mo
27″ barrel. From Japan.
10 A 4214 X. Wt., 12 lbs..........2



16^{95}

15x-45x zoom terrestrial Telescope

Compact and lightweight—ideal for target spott
Terrestrial viewing scope has 40mm objective l
fingertip focusing control. Achromatic optics.
long. With 9″ table tripod. Japan. Wt., 4 lbs.
10 A 4250 S..1

*See page 438 for full Credit Det

.top values in our largest selection ever

6.95
With case
69.95
$5 monthly*

All models have roll-down rubber eyecups
44.95
$5 monthly*

With case
54.95
$5 monthly*

er-power 25x70 Binoculars

most powerful binoculars offer 25 power and 70mm objective es that pull in distant objects; l for star gazing or satellite watch- Hard coated achromatic objec- s, full 131-foot field at 1000 yards. high. For best viewing of distant ects order tripod (listed below) for dy support. Binoculars with case. an. Shpg. wt., 7 lbs.

5130 S. .69.95

5062 S. Telescoping Tripod. Rec- nended for viewing distant ob- s with 20x50, 20x60, and 25x70 power binoculars. With carrying . Japan. Shpg. wt., 3 lbs. 6.95

20x50 wide-angle Binoculars

High power puts you 20 times closer to the action while affording a 50% wider field of view. An excellent choice for long-range viewing. Ideal for astronomical use, satellite tracking. Hard coated achromatic objective lenses. Center focus with right eye adjustment. With roll down rubber eyecups to protect glasses. 205′ field at 1000 yards. 7¼″ high. With carrying case. From Japan. Shpg. wt., 5 lbs.

10 A 5131 S. 44.95

10 A 4190 S. Long Range 20x50. Similar to above with 157′ field at 1000 yds. With carrying case. From Japan. Shpg. wt., 6 lbs. 29.95

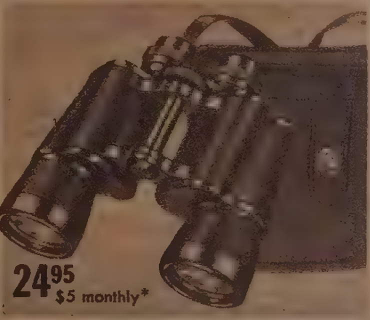
High-power 20x60 Binoculars

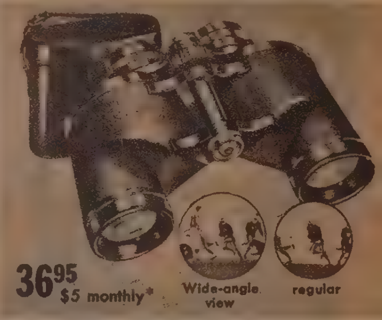
High power and giant 60mm objective lenses combine to give you the large, bright images necessary for spectacular long-distance views. Achromatic lenses have amber coating to cut glare. Center focus with right eye adjustment. 210′ field at 1000 yards. For best viewing of distant objects use tripod listed at left. Equipped with roll down rubber eyecups to protect eyeglasses and sunglasses from scratches. Complete with carrying case. From Japan. Shpg. wt., 4 lbs.

10 A 5061 S. 54.95

10 A 5060 S. 20x50. As above, but 173′ field. Japan. Wt., 3 lbs. 39.95

Converts binocular to spotting scope
14.95





2.5x Magni-Booster

verts your regular bincoulars to gh-power spotting scope. Increases er, 2½ times. Adapter (order be- locks to objective of most binocu- (not 20x50, 20x60, or 25x70). h case. From Japan.

5068 S, Wt., 1 lb. 14.95

LOCKING ADAPTERS

g. Wt., 4 oz.

Stock No.	Mfr's Type	For Front Lens Size	EACH
A 5069 S	2590	35mm	2.49
A 5070 S	2591	40mm	2.49
A 5071 S	2592	50mm	2.49

Bright image 7x50 Binoculars

Our most versatile binocular. Best for general purpose viewing, ideal for night or marine use. Also great for astronomy, bird watching, hunting. Feature large 50mm objective lenses for extra-bright images, even in poor light conditions. Also have roll-down rubber eyecups to protect glasses. 373′ field at 1000 yards. 6½″ high. With case. Japan.

10 A 4189 S. Wt., 6 lbs. 24.95

10 A 4248 S 7x35. As above, but 35-mm objective lenses and 368′ field. Japan. Shpg. wt., 6 lbs. 19.95

8x40 wide-angle Binoculars

Wide field of vision makes these binoculars ideal for sports events and general use. Feature a full 8 power and large 40mm objective lenses for extra light gathering, brighter images. Compact and lightweight—weigh only 27 ounces. Ultra-violet coated lenses. 472′ field at 1000 yards. Center focus. Folding rubber eyecups, tripod socket. 4½″ high. Japan.

10 A 4216 S. Shpg. wt., 6 lbs. . . .36.95

10 A 4198 S. As above, but 7x35. 551′ field at 1000 yards. Weigh 25 ounces. Japan. Shpg. wt., 6 lbs. 29.95

89^{95} **Professional-quality Zoom Microscope Outfit**

Deluxe model meets many of the demands of the professional microscope user. Zoom power from 50-1200X. Four objective turret with 5X, 10X, 40X, and 60X achromatic objectives. Zoom ocular 10X through 20X. Plano concave mirror, 1½" dia. Geared ratchet coarse focusing, single knob fine-focusing. Automatic power computer.

Optical condenser built into mechanical stage. Adjustable down stop to protect slides and lenses. With 2 prepared slides, 4 blank slides, instructions, mechanical stage, heavy-gauge vinyl dust cover and book. Mahogany finished wood carrying case. Japan.
10 A 5127 X. Wt., 10 lbs........**89.95**

39^{95} **Wide-angle/viewer Two-Microscope Outfit**

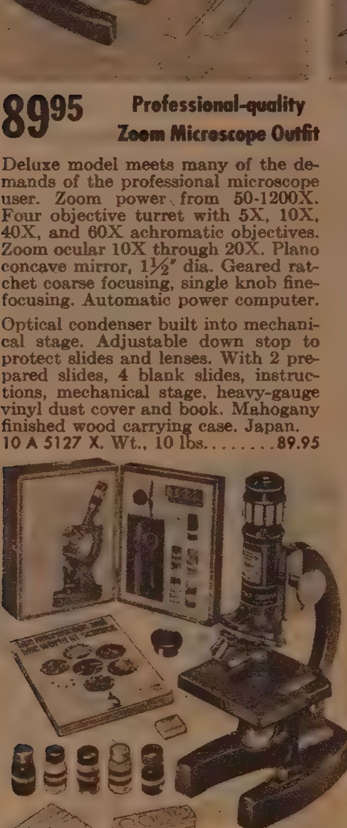
Top-value outfit includes 40-1200X wide-angle microscope, plus 50X and 100X reflecting microscope viewer. Ideal combination for the serious student of microbiology. Precision wide-angle microscope has rotating turret with 5X, 12X, 40X, and 60X objectives; 10X and 20X eyepieces.

Plano-concave mirror has light that operates from two "C" batteries (not included) or AC transformer. 3½x3" stage. Rack and pinion mechanism. Reflecting microscope projects image on screen for close study. With electric illuminator, instruments, specimens. Gift box. Japan.
10 A 4251 X. Wt., 14 lbs.........**39.95**

29^{95} **Complete 77-piece Microscope Outfit**

Includes everything required by
inquiring young student. Technici
type microscope boasts zoom pov
from 50-1200X. Has 10X through 2
zoom ocular; 8X, 20X, 40X, and 6
achromatic objectives on rotating t
ret. Efficient light power supply fo
bright, clear image is produced by
plano-concave mirror with AC tra
former.

Micro-fine adjust obtains the sharp
possible image. Safety stop elimina
chance of damaging slides and lens
77-piece outfit includes slides, spe
mens, and instruments. Gift b
From Japan.
10 A 4319 X. Wt., 12 lbs........**29**



19^{95}

50-900X Zoom Microscope Outfit

Four-objective enclosed turret: 5X, 10X, 40X, and 60X. Automatic power computer calculates magnification for all lenses and zoom powers. Zoom ocular 10X through 15X. Vinyl dust cover; AC adapter jack in base. With slides, specimen, book, case. Japan.
10 A 4256 X. Wt., 8 lbs............**19.95**
10 A 5021 S. 117 VAC Adapter. Shpg. wt., 1 lb......................**3.95**

9^{95}

30-power Telescope

Lightweight portable telescope features adjustable power to 15X, 20X, 25X, 30X. Black barrel with chrome draw tubes. Coated lens. Opens to 16", closes to 7". 30mm lens, 210mm focal length. 52-102' field at 1000 yds. With case. Japan.
10 A 4191 S. Wt., 3 lbs..........**9.95**

12^{95}

Varipower terrestrial Telescope

25X low power permits close view of a wide field. 50X high power gives you a closer look at far-away objects. Prefocusing gauge prevents focus fumble. Coated 40mm objective lens. 10" tripod, altazimuth mount, carrying box. Japan.
10 A 5073 X. 4 lbs............**12.95**

7^{95} **Wear these like eyeglasses . . weigh less than 3 ounces**

Sports spectacles for indoor or outdoor sporting events—leaves hands free! Puts you 2.8 times closer to the action. Coated optics focus to match each eye individually. Light and comfortable, can be worn for hours without fatigue. With soft rubber light shields, carrying case. Japan.
10 A 4264 S. Shpg. wt., 10 oz..........**7.95**

Buy with no money down . . full Credit details on page 4

POLAROID Color Pack Outfits

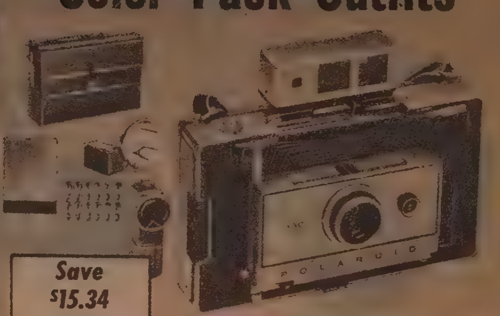
Save $10.80

189⁹⁵

Color Pack 360 outfit features rechargeable electronic flash

parately, $200.75. Outfit: Model 360* Camera, Case, oto Album, Color Pack film. Camera features rechargeble electronic flash, charger, built-in electronic development timer. Triplet lens, electronic shutter with two exsure ranges for color, two for B&W. Zeiss Ikon range/ewfinder automatically corrects for parallax and field e. Close-up, Portrait kits at right.

A 0136 L4S. Shpg. wt., 7 lbs....................189.95
A 5087 S. Model 360 Alone. Shpg. wt., 3 lbs......179.95



Save $15.34

159⁹⁵

Built-in electronic timer buzzes when picture is ready

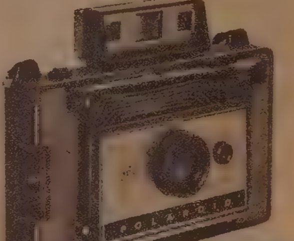
Separately, $175.29. Includes: Model 350* Camera, Self-Timer, Carrying Case, Flashgun, 12 Bulbs, Color Pack film. Camera boasts triplet lens, electronic shutter with four exposure ranges. Zeiss Ikon range/viewfinder, plus built-in development timer. Metal housing.

10 A 0146 L4S. Shpg. wt., 6 lbs....................159.95
10 A 5089 S. Model 350 Alone. Shpg. wt., 3 lbs......144.95
10 A 4859 S. Close-Up Kit for 360, 350. 1 lb..........10.95
10 A 4704 S. Portrait Kit for 360, 350. 1 lb..........10.95

89⁹⁵

Included in 330 and 320 Outfits

Camera carrying case, Color Pack film, flashgun and 12 bulbs



74⁹⁵

330 Outfit . . camera has triplet lens

odel 330* Color Pack camera with accessories above. atures electric eye and electronic shutter for correct posure automatically. Built-in mechanical timer. Autotic time exposures up to 10 seconds. Double-window upled type range/viewfinder. Plastic housing.

A 0133 L4S. Shpg. wt., 6½ lbs....................89.95
A 5091 S. Model 330 Alone. Shpg. wt., 3 lbs..........74.95

Value-priced Camera does all the work for you

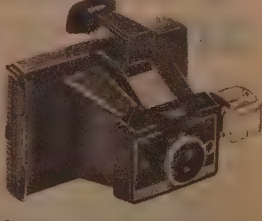
Model 320* camera with accessories above. Lowest-priced folding Color Pack camera features electric eye operation that sets correct exposure automatically—even for flash. Just load, aim, shoot—the camera does the rest. Range/viewfinder. Plastic housing.

10 A 0132 L4S. Shpg. wt., 6 lbs....................74.95
10 A 5092 S. Model 320 Alone. Shpg. wt., 3 lbs......59.95

Film, Camera Accessories for Polaroid

A 4928 S. Print Copier. Make color or B&W prints with ur Polaroid camera. Not for Colorpack II. 1 lb.....7.95
A 5088 S. Carryall Case. Shpg. wt., 1½ lbs........10.95
A 4883 S. Development Timer. Wt., 4 oz..............6.95
A 4884 S. Self-Timer. Delays shutter. Wt., 4 oz... .4.95
A 4909 S. Flash Attachment. For 200- and 300-series cept 360) cameras. Uses M-3 flashbulbs. 1½ lbs....7.95
A 4903 S. M-3 Flashbulbs. Wt., 6 oz...........Pkg. 12/1.59
A 4885 S. Cloud Filter. Not for Models 320, 210, 220 or ingers. Shpg. wt., 7 oz..............................4.95
A 4886 S. Cable Release. Shpg. wt., 4 oz...............1.95
A 4879 S. Type 107 B&W Film. 8 exposures. 6 oz.....2.50
A 4880 S. Type 108 Color Film. 8 expos. 6 oz..........4.90
A 4784 S. Album. Holds 90 3¼x4¼" photos. 1 lb....4.95

CESSORY LENSES. For Color Pack 360, 350, 340, 250, 240, 0. With viewfinder, leather case. Japan. 1 lb.
A 4708 S. Telephoto Lens. 2X magnification.........19.95
A 4709 S. Wide-Angle Lens. 75% more coverage....19.95
A 4854 S. Wide-Angle/Telephoto Lens Outfit. *Separately, 9.90.* Both with dual viewfinder, case. 2 lbs..........34.95



Includes case, Color Pack film, 3 flashcubes

39⁵⁰

Colorpack II* has electric eye operation

Features fast loading, electric eye, electronic shutter, viewfinder, rangefinder, triplet lens, built-in flash.

10 A 0131 L4S. Shpg. wt.. 3¾ lbs....................39.50
10 A 5093 S. Colorpack II Alone. Wt., 2¾ lbs.........29.95
10 A 5094 S. Carryall Case Alone. Wt., 1½ lbs..........3.95
10 A 4865 S. Flashcubes. 4 shots each. 6 oz.......Pkg. 3/1.59
10 A 5126 S. Print Copier. Wt., 1 lb....................7.95

olor in 60 seconds, black-and-white in 15 seconds . . prints are 3¼x4¼"

Our largest selection ever of Cameras

MIRANDA

Our finest Single Lens Reflex

257^{50} *Super-fast f/1.4 lens for indoor shots*

Sensorex. Thru-lens CdS exposure meter reads "modified spot" indicated in viewfinder—you just match needles for precise exposure setting. Fast 50mm f/1.4 lens focuses close as 17". Bayonet mount for automatic lenses, inside screw mount for preset types. Interchangeable viewfinder. Microprism focusing grid. Depth of field preview. ASA 25-1600. Focal plane shutter, 1-1/1000 sec., B. Self timer. FP/X sync. From Japan.
10 A 5157S. Wt., 5 lbs.........257.50

Miranda Sensorex f/1.8. As above, but with 50mm f/1.8 lens. Japan.
10 A 4806 S. Wt., 5 lbs.........214.95

MINOLTA

minolta
SR-T 101

Light-averaging 35mm SLR

219^{50} *Automatically indicates exposure setting needed*

Model SR-T 101. *Was $239.50 in Catalog 280.* Focusing, composing, shutter speed, and exposure data all visible in control-integrated viewfinder. CLS (Contrast Light Compensator) light averaging system. Thru-lens reading at maximum aperture. 55mm f/1.7 lens in bayonet mount. ASA 6-6400. Quick return mirror with lockup. 1-1/1000 sec. plus B. Depth of field preview. Self timer. FP/X flash sync.
10 A 4775 S. Japan. Wt., 5 lbs. 219.50

10 A 5165 S. 135mm f/2.8 Auto. Telephoto Lens for above. Japan. 1 lb. 69.95

10 A 5158 S. 35mm f/2.8 Auto. Wide-Angle Lens for above. Japan. 1 lb. 69.50

YASHICA

TL ELECTRO X
YASHICA

Thru-lens metering SLR

199^{95} *Perfect reading with l*
exposure readout syste

Model TL Electro-X. Thru-lens integra
ed circuit exposure readout syste
gives you accurate exposure setti
even under subdued light. Red over
under indicator lamps in viewfind
signal correct exposure. 50mm f/1.
lens in screw mount. Electric foc
plane shutter has speeds from
1/1000 sec. with infinite range b
tween settings. ASA 25-800. Depth
field preview. Self timer. FP/X flas
sync. From Japan.
10 A 5155 S. Wt., 5 lbs.........199.9

Yashica TL Electro-X f/1.4. Same
above but with faster f/1.4 lens.
10 A 5156 S. Wt., 5 lbs.........229.9

YASHICA

SLR with dual CdS sensors

184^{95} *Easy-to-use match-needle exposure control*

Model TL-Super. *Was $189.95 in Catalog 280.* Single lens reflex camera features CdS light sensors that read the exposure through stopped down lens. Has 50mm f/1.7 lens in universal thread mount. ASA range from 25-800. Micro-screen focusing to 1¾ ft. Instant return mirror with lockup for extra-wide-angle lenses. Quiet focal plane shutter has speeds from 1-1/1000 sec. plus B. Self-timer. FP/X flash sync. "Hot" accessory shoe.
10 A 4430 S. Japan. Wt., 5 lbs. 184.95

Yashica TL f/2. Same exposure control system as above. 50mm f/2 lens. Speeds, ½-1/500 sec. plus B. FP/X flash sync. From Japan.
10 A 4782 S. Wt., 5 lbs.........157.95

PETRI

Behind-lens metering SLR

144^{95} *CdS cross-coupled exposure meter system*

Model FT. Budget-priced 35mm SLR features cross-coupled CdS behind-the-lens metering system. Has 55mm f/1.8 lens. Boasts pentaprism viewfinder with micromatic lens focusing. Bayonet type interchangeable lens mount. Instant return mirror. Focal plane shutter speeds from 1-1/1000 sec. plus B. Self timer. Full flash synchronization for M-FP/X. Single stroke rapid film advance and self-cocking shutter. With 52mm screw-in filters. From Japan.
10 A 5152 S. Wt., 5 lbs.........144.95

10 A 5153 S. 135mm f/2.8 Auto. Telephoto Lens for above. 1 lb. Japan. 62.95

10 A 5154 S. 35mm f/2.8 Auto. Wide-Angle Lens for above. 1 lb. Japan. 59.95

MAMIYA/SEKOR

1000 DTL
mamiya/sekor

Versatile 35mm SLR

209^{50} *Has spot and averagin*
light metering systems

Model 1000 DTL. Feature-packed sing
lens reflex camera boasts both sp
and averaging thru-lens meterin
Switch selects system, pointer
viewfinder indicates one in use. Pres
ing film advance lever to camera bod
activates system, stops down lens f
exposure reading. Area measured b
each system outlined in viewfinde
ASA 25-3200. 55mm f/1.8 lens in un
versal thread mount. Speeds,
1/1000 sec. plus B. Self timer. FP/
flash synchronization. From Japan.
10 A 4464 S. Wt., 5 lbs.........209.5

Mamiya/Sekor 500 DTL. Same du
metering system as above. 50mm f/
lens. 1-1/500 sec., B. FP/X. Japan.
10 A 4472 S. Wt., 5 lbs.........169.5

All cameras listed on this page come with deluxe carrying cas

Slide Projectors and Projector Accessories

Our lowest priced 35mm

Yashica 5000E. Rangefinder camera has IC exposure control. Over/under indicator lights in viewfinder signal correct exposure. 45mm f/1.8 lens. ASA 10-800. 1-1/1000 sec., B. Self-timer. M/X sync. Japan.
10 A 4460 S. Wt., 5 lbs. . .79.95

79.95

CdS electronic shutter 35mm

Yashica Electro 35. You set aperture, "computer" sets electronic shutter. Shoot indoors, even in candle light. Range/viewfinder. 45mm f/1.7 lens. ASA 10-400. Speeds from 30-1/500 sec. plus B. Self-timer. X sync. Japan.
10 A 5160 S. Wt., 5 lbs. . .99.95

99.95

Yashica "Atoron" ultraminiature Camera

You won't miss that "once-in-a-lifetime" shot with this ultraminiature camera. Smaller than a pack of cigarettes. Take it anywhere. Just align dial with meter needle and shoot. Camera selects lens opening (f/2.8-f/16) and speed (1/45-1/250 sec.). Has built-in Y2, UV filters. 4x7/8x1 5/16". Weighs only 4 oz. With 80 B and 4x filters, flash, case. Japan.
10 A 4998 S. Wt., 3 lbs. . . .84.95

Film. 20 exp./cartridge. 3 oz.
10 A 4999 S. Kodachrome II Color Film. 2-Roll Pkg./2.60

10 A 4802 S. XT Pan Black-and-White Film. . .2-Roll Pkg./2.20

Fits in shirt pocket

With case, filters, flash

84.95

Airequipt and Sawyer's 35mm Slide Projectors

Panel focusing semi-automatic

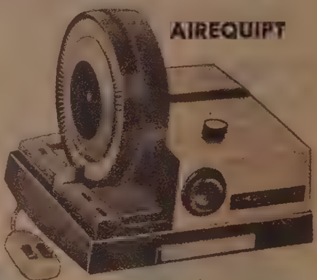
49.95

Model 125. Thrifty-priced slide projector lets you relive your favorite moments. Gives sharp, clear projection of all your 2x2" slides. Quality 4" three-element lens. Has easy-to-use panel controls for focusing and elevation. Three-way on/off switch. Bright 500-watt lamp. Efficient cooling system lets you enjoy your slides for hours with no worry of over-heating the projector. With 100-slide magazine. Takes Airequipt metal or plastic trays, plus stacker. For 115 VAC.
10 A 4750 X. Wt., 10 lbs. 49.95

Remote control automatic Projector

59.95

Model 135. Our best-selling slide projector. Designed to give you "most-wanted" features at lowest possible price. Boasts remote controls for forward, reverse, and focusing. Lets you show your slides from the comfort of your favorite chair. 4" three-element lens. Panel controls for elevation and focus. 500-watt lamp. Efficient cooling system. Jam-proof changer handles 2x2" slides. With 100-slide magazine. Uses Airequipt metal or plastic trays, plus stacker. For 115 VAC.
10 A 4811 X. Wt., 11 lbs. 59.95

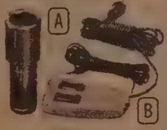


Automatic electronic focusing

99.95

Model 350/EF. Our finest slide projector. Does all the work for you. Just focus the first slide by remote control—all others focus automatically in just 1/40th second. Remote controlled forward and reverse. Has bright, long-lasting 500-watt quartz lamp. Thumb control for elevation and leveling leg. Panel focusing control. Has 4" f/3.5 lens. Exhaust system for cool operation. Uses Airequipt metal or plastic trays, or stacker. Usable with "Sound sync" below. For 115 VAC.
10 A 4751 U. Wt., 14 lbs. 99.95

Airequipt slide projector Accessories



A 10 A 4434 S. 4-6" f/3.5 Zoom Lens. Wt., 6 oz. 34.95

B 10 A 4435 S. Sound Synchronizer. For 350/EF only. Add words and music to your slide shows. Slides change to sound track of stereo tape recorder. With cable and adapter. 6 oz. 24.95

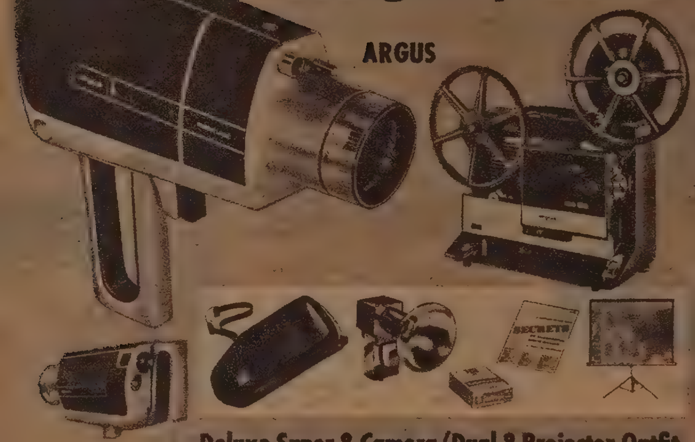
10 A 4827 S. 36-Slide Metal Magazine. ½ lb. . . . 1.69
10 A 4828 S. 36-Slide Plastic Magazine. ½ lb. . . . 1.39
10 A 4812 S. 40-Slide Metal Stacker Tray. ½ lb. 8.95
10 A 4912 S. 100-Slide Round Magazine. 1 lb. . . 2.69

Sawyer's Projector/Viewer

Bright 3½x3½" viewing area allows slides to be shown even in a lighted room. Converts to conventional slide projector with flip of a switch. Holds up to 40 2x2" slides. Convection (no fan) cooled 100-watt lamp. Weighs only 5 lbs. 8x10x10". For 115 VAC. Shpg. wt., 6 lbs.
10 A 5159 S. 29.95

29.95

Bargain prices on complete zoom



Deluxe Super 8 Camera/Dual 8 Projector Outfit

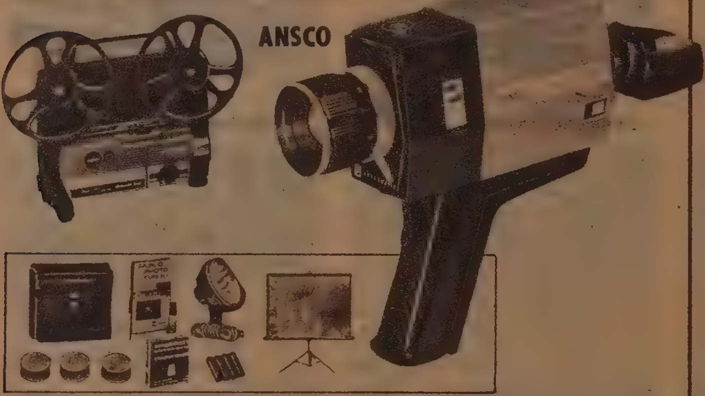
Save $45.00

229⁸⁰

$12 monthly
see page 438

Separately, $274.80. 815 Super 8 Camera has automatic thru-lens CdS eye, f/1.8 3:1 zoom lens, folding handle. 881 Dual 8 Projector has reel-to-reel threading, forward/still/reverse, film trimmer, 400′ takeup reel. Accessory Kit: camera case, movie light, Kodachrome II film, movie-making guide. Plus 30x40″ tripod screen.

10 A 0152 L2U. Japan. Shpg. wt., 33 lbs..........229.80
10 A 4788 S. Camera Alone. Includes film, four "AA" batteries. Shpg. wt., 5¼ lbs..........119.95
10 A 5185 U. Projector Alone. Shpg. wt., 13 lbs..........114.95
10 A 5186 U. Accessory Kit Alone. Wt., 8 lbs..........29.95
10 A 4436 U. Screen Alone. Shpg. wt., 7 lbs..........9.95



Zoom Super 8 Camera/Dual 8 Projector Outfit

Save $20.00

174⁸⁵

$9 monthly
see page 438

Separately, $194.85. ST/97 Super 8 Camera has automatic thru-lens CdS exposure control, over/under exposure warning signal, f/1.7 3½:1 zoom lens, film pulse indicator. 388Z Dual 8 projector has automatic threading, adjustable takeup control, rapid rewind, f/1.5 zoom lens, 400′ takeup reel. Accessory Package: case, 3 extra reels and cans, light, 4 "AA" batteries, 30x40″ tripod screen, film, guide.

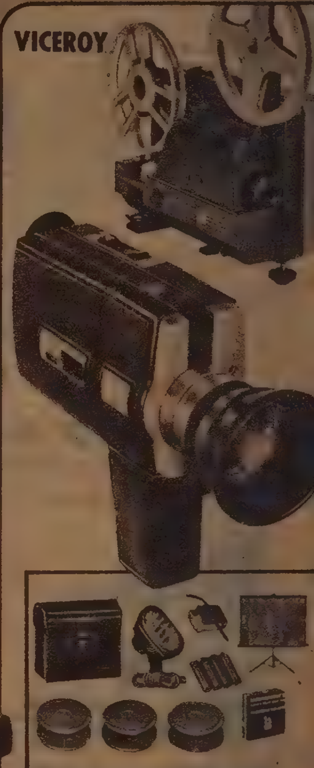
10 A 0154 L2U. Japan. Shpg. wt., 28 lbs..........174.85
10 A 5188 S. Camera Alone. Shpg. wt., 3 lbs..........89.95
10 A 5189 U. Projector Alone. Shpg. wt., 13 lbs..........74.95
10 A 0153 L2X. Accessory Package Alone. 12 lbs..........29.95

SUPER 8 COLOR FILM

Kodachrome II color film in instant-loading Super 8 cartridge. 50 feet. For all movie cameras listed on this and facing page.
10 A 4932 S. Shpg. wt., 6 oz......2.69

"AA" ALKALINE BATTERIES

Alkaline batteries for long life and dependable performance. Specially suited for photographic applications. Cameras listed use four.
18 A 5131. Wt., 3 oz..........Pkg. 2/79¢



Save $25.00

194⁸⁰

$10 monthly
see page 438

Big-value Super 8 Outfit includes Dual 8 Projector

Separately, $219.80. Model 25 Camera has f/1.8 5:1 power zoo lens, thru-lens CdS eye, remot control. film footage indicator. 18 32 fps. Model 804 Dual 8 Projecto has zoom lens, automatic threading, forward/reverse/still, 400 takeup reel. Accessory Package camera case, sealed beam movi light, splicer, four "AA" batterie one Super 8 film cartridge, 3 extr reels and storage cans, cartoon 30x40″ tripod screen. Japan.

10 A 0151 L2U. Wt., 30 lbs...194.8
10 A 5036 S. Camera Alone. Shpg wt., 4 lbs..........99.9
10 A 5042 U. Projector Alone. Shpg wt., 12 lbs..........89.9
10 A 5183 U. Accessory Packag Alone. Shpg. wt., 8 lbs.......19.9
10 A 4436 U. Screen Alone. Shpg wt., 7 lbs..........9.9

SHIPPING NOTE: Items with suffix U, W or Z in stock no. sent tr or express. See Ordering Information page

Movie Outfits and Super 8 zoom Cameras

Save $15.00

99^{85}

Low-priced Super 8 2:1 zoom Movie Outfit

Separately, $114.85. Model 200 Super 8 Camera has f/1.8 manual 2:1 zoom lens, CdS electric eye meter system. Model 801 Super 8 Projector has automatic film threading; rapid rewind; fast f/1.4 lens; framing, focus, and elevation controls; 400′ takeup reel; film trimmer. Accessory Package: camera case, 30x40″ tabletop screen, double light bar with bulbs, four "AA" batteries, and 50′ film cartridge.

10 A 5199 U. Japan. Shpg. wt., 21 lbs..........99.85
10 A 5084 U. Camera Alone. Wt., 1¾ lbs.........44.95
10 A 5082 U. Projector Alone. Wt., 13 lbs..........54.95
10 A 5086 U. Accessory Pkg. Alone. 8 lbs.........14.95

Save $15.00

149^{80}

Full-feature Super 8 3:1 zoom Outfit

Separately, $164.80. 207 Super 8 Camera has f/1.8 manual 3:1 zoom lens, CdS metering. 802 Super 8 Projector has automatic threading; reverse/still/forward/fast forward; rapid rewind; f/1.4 lens; framing, focus, elevation controls; 400′ takeup reel; trimmer. Accessory Pkg.: case, light, film, batteries, splicer, book. Plus 30x40″ tripod screen.

10 A 0155 L2U. Japan. Shpg. wt., 28 lbs.........149.80
10 A 5196 S. Camera Alone. Wt., 34 lbs..........64.95
10 A 5197 U. Projector Alone. Wt., 12 lbs..........69.95
10 A 5198 U. Accessory Pkg. Alone. 7 lbs...........19.95
10 A 4436 U. Screen Alone. Wt., 7 lbs...............9.95

194^{50}

$10 monthly*

B & H power zoom with provision for sound

Model 433. Deluxe 5:1 power zoom Bell & Howell camera is sound sync adapted for Model 450 cassette recorder (order at right). Take sound movies with ease of cartridge-loading. f/1.8 5:1 9-45mm power zoom lens. Split rangefinder. Electric eye, manual exposure control. Exposure scale, film counter. in viewfinder. 18, 36 fps. Reflex viewing. Fold-down grip. Remote control. Battery tester. "A" filter. Socket. Less batts.

10 A 5191 S. 4 lbs.........194.50

169^{95}

$8 monthly

Yashica 6:1 power zoom . . professional quality

Model 60E. Behind-lens CdS cell samples light, servo motor adjusts diaphragm. f/1.8 8-48mm lens. Adjustable thru-lens viewfinder shows f/stop in use, warns of under-exposure. Spotlight. Single frame, variable speed 12, 18, 24 fps. Self-resetting film footage counter. Remote control. "A" filter. Wrist strap, batteries. Japan.

10 A 4106 S. 4 lbs.........169.95

10 A 4732 S. Model 40E. Above, but f/1.8 4:1 power zoom lens. Shpg. wt., 4 lbs.........149.95

Save $20.00

219^{90}

B & H sound Camera Outfit

Separately, $239.90. Model 436 Super 8 Camera, 450 cassette recorder for synchronized film and sound: f/1.9 3:1 11-35 mm zoom lens. Use with Model 458Z projector, page 529. Uses 5 "C" batts.; order below. Ext. spkr. outlet. Case, mike, cassette.

10 A 5192 S. Wt., 10 lbs. 219.90

10 A 5193 S. Camera Alone. Shpg. wt., 3 lbs...........129.95

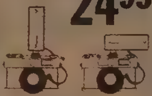
10 A 5194 S. 450 Cassette Recorder Alone. Japan. 8 lb. 109.95

18 A 5078. Batts. 10 oz....2/33¢

Accessories for bigger and better pictures

Kako compact Electronic Flash

24.95



Eliminate the time and trouble of handling flashbulbs with this transistorized electronic flash. Provides bright, clear indoor shots with cameras that take electronic flash. Mounts on camera either vertically or horizontally. 55° coverage angle.

Kodachrome II Guide No. 40. Recycles in 8 to 10 seconds. Gives 60 flashes per charge. Flash duration is 1/3000 sec. Operates from two built-in NiCad batteries or 110-120 VAC. With batteries. From Japan.
10 A 4756 S. Wt., 1¼ lbs. . . 24.95

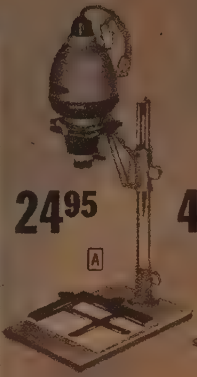
Viceroy Electronic Flash

Low-cost electronic flash (not illustrated) operates on two batteries or 117 VAC. Flash duration is 1/2000 sec. Color temperature, 5700° K. Guide No. 28 (ASA 25) With 12-ft. AC cord. Order batteries below. Japan.
10 A 5077 S. Wt., 2 lbs. 14.95
18 A 5083. "AA" Batteries. 2/27¢
18 A 5426. Alkaline Batts. 4/1.31

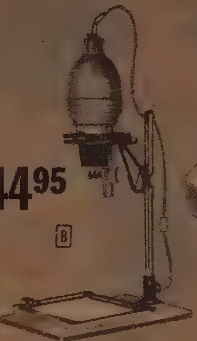
44.95

Kako Super Elite Electronic Flash

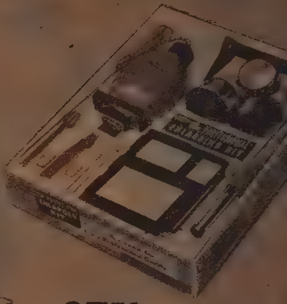
Features automatic voltage control circuit, recharge-indicator lamp, multiple flash socket. Kodachrome II Guide No. 64. Recycles in 5-8 seconds. 50 flashes/charge. Flash duration, 1/1500 sec. Color temp., 6000° K. Operates on batteries or 110-120/220-240 VAC. Univ. mount, PC cord, 4 NiCad recharg. batts. Japan.
10 A 4011 S. Wt., 3 lbs. 44.95
18 A 5629. AA 1.5 V Nicad Battery. Shpg. wt., 3 oz. . . . . . . Each 1.93



24.95 A



44.95 B



87.50 C

A Accura 35mm Enlarger makes full-detail blowups

Make blowups up to 8x10" with this quality enlarger. Handles all 35mm blac and-white film. Includes double condenser and 50mm f13.5 lens. Size, 15¼x13 x8". Requires #211 enlarger bulb (order below). For 110-120 volts, AC or D From Japan.
10 A 4892 X. Shpg. wt., 11 lbs. . . . . .24.

B Accura Color Enlarger for all 2¼x2¼" negatives

Enlarges 2¼x2¼" negatives, both color and black-and-white, up to 15x1 Includes filter drawer, double condenser and 75mm f/3.5 lens. Size, 21x16½ 9½". Requires #211 enlarger bulb (order below). For 110-120 volts, AC or D From Japan.
10 A 4893 X. Shpg. wt., 21 lbs. . . . . .44.

C Complete 14-piece 35mm Enlarging Outfit

Contains all you need to make professional-quality prints up to 8x10". Comple outfit includes condenser enlarger, 35mm negative carrier, lens, safelight, th 8x10" trays, two print tongs, roll film tank, thermometer, two film clips, fo way easel and instructions. Requires #211 enlarger bulb (order below). Fr Japan.
10 A 4757 U. Shpg. wt., 26 lbs. . . . . .87.
10 A 4622 S. #211 Enlarger Bulb. Shpg. wt., 3 oz. 8

Vivitar and Accura Lenses for 35mm SLR cameras

Preset Lenses

Fit Yashica, Pentax, Mamiya/Sekor type lens mounts only. Not for Nikon, Canon or Minolta. Adapter and lens dust cap included with all models. From Japan.

Accura 35mm f/2.8 Wide-Angle Lens. Has extra-wide 63° coverage angle. Focuses from 3 feet to infinity. Stops down to f/16.
10 A 4994 S. Shpg. wt., 9 oz. 36.95

Vivitar 135mm f/2.8 Telephoto Lens. 18° coverage angle. Focuses 6 feet to infinity. Stops down to f/22.
10 A 4760 S. Shpg. wt., 11 oz. . . .34.95

Accura 300mm f/5.5 Telephoto Lens. Provides 6x magnification. Has 8° coverage angle. Focuses from 25 feet to infinity. Tripod socket.
10 A 4431 S. Shpg. wt., 2½ lbs. . 44.95

Accura 70-230mm f/4.8 Zoom Lens. 3 to 1 zoom ratio. Focuses from 8 feet to infinity. Stops down to f/22. Tripod socket.
10 A 4487 S. Shpg. wt., 2½ lbs. 119.95

Automatic Lenses

Stop down automatically with Yashi- Pentax, Mamiya/Sekor type lens mou Not for Nikon, Canon or Minolta. L dust cap included. From Japan.

Vivitar 35mm f/2.8 Wide-Angle Le Features extra-wide 62° cover angle. Focuses from 3 feet to infin Stops down to f/16.
10 A 4763. Shpg. wt., 1 lb. . . . . .59.

Vivitar 135mm f/2.8 Telephoto Lens. 18° coverage angle. Focuses from feet to infinity. Stops down to f/ Built-on sun shade.
10 A 5173 S. Shpg. wt., 2 lbs. . . .69.

Accura 300mm f/5.5 Telephoto Lens. 8° coverage angle. Stops to f/ Tripod socket in rotating collar.
10 A 4488 S. Shpg. wt., 2½ lbs. 79.

Accura 70-230 f/4.8 Zoom Lens. 3.3 t zoom ratio. Focuses from 8 feet infinity. Stops down to f/22. tripod socket.
10 A 4490 S. Shpg. wt., 3 lbs. . .149.

SHIPPING NOTE: Items with suffix U, W or Z in stock no. sent tr or express. See Ordering Information pa

8mm Movie Projectors and Film Editor

ELL & HOWELL

9^{95} *Provision for adding sound*

luxe dual 8 zoom sound Projector

del 458Z. Has every quality feature of a y fine projector. Synchronized-sound-pted for Bell & Howell 450 cassette re-der (P. 527). Forward/reverse/still/rapid ind. Variable speed control. 15-25mm 6 zoom lens. Automatic reel-to-reel thread- Dial focusing; framing dial. With trim-, 400′ takeup reel, reel adapters. 117 VAC.

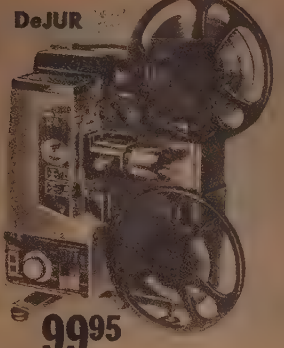
A 5174 U. Shpg. wt., 19 lbs..........169.95

A 4834 U. Model 456Z. Above, but no sound vision or variable speed control. f/1.6 n lens. Shpg. wt., 17 lbs..........144.95

A 5176 U. Model 357Z. Above, but Super 8 . No sound provision or variable speed trol. f/1.6 zoom lens. 16 lbs..........99.95

A 4840 S. Model DJL Projection Lamp. For models above. Shpg. wt., 6 oz..........5.50

DeJUR



99^{95}

Dual 8 zoom Projector

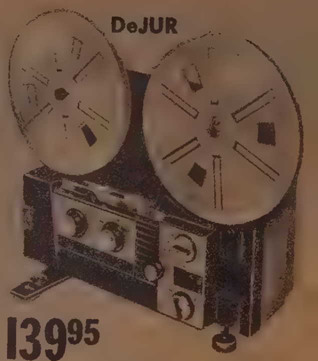
Model DP-787Z. Dual 8 projector shows all your Super 8 or Standard 8mm films at the flip of a switch. Quality features include automatic threading, multiple speed control, forward/reverse/still projection. f/1.5 zoom lens. Has automatic room lamp receptacle that turns light off when projector is turned on. Full 400′ reel capacity. Complete with film trimmer. For 117 VAC.

10 A 4735 U. Wt., 18 lbs..........99.95

10 A 4734 U. Model DP-787. As above, but with standard f/1.5 lens. Shpg. wt., 16 lbs..........89.95

10 A 4749 S. Dejur Projection Lamp. Shpg. wt., 6 oz..........6.25

DeJUR



139^{95}

Dual 8 zoom has fully illuminated still projection

Model 86. Full-feature Dual 8 projector has completely illuminated still projection. Lets you stop action. Has forward/reverse control. Variable speed control lets you speed up or slow down projection as desired.

Slow motion control gives clear slow motion projection. Features sharp f/1.5 zoom lens. Has automatic reel-to-reel threading, fast rewind. Room light receptacle. Full 400-ft. reel capacity. With long-lasting 500 watt brilliance quartz lamp. For 117 VAC.

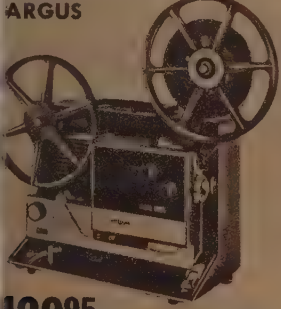
10 A 5177 U. Wt., 20 lbs..........139.95

Model 84Z Dual 8 Zoom Projector. Low-priced projector features totally illuminated still projection. Has f/1.6 zoom projection lens. Has fast rewind, automatic reel-to-reel threading. Full 400-ft. reel capacity. With 500 watt lamp and carrying case. For 117 VAC.

10 A 5178 U. Wt., 19 lbs..........89.95

10 A 5179 U. Model 84. As Model 84Z above, but with standard f/1.6 lens. Shpg. wt., 18 lbs..........79.95

ARGUS



129^{95}

al 8 zoom Projector with variable speed control

del 882B. Features sharp f/1.5 n lens. Has single lever control orward, reverse or still projec-. Variable film speed control b lets you speed up or slow n projection for special effects lose scrutiny. Jamproof auto-ic reel-to-reel threading. Brilli- 500-watt lamp with turbo-ver cooling. Intermission light et. 400-ft. reel capacity. Built-lm trimmer. With 400-ft. take-eel. 117 VAC.

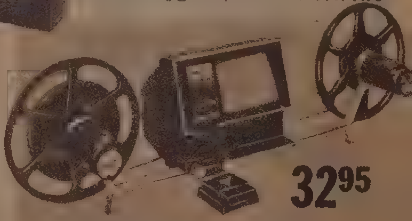
5181 U. Wt., 15 lbs..........129.95

109^{95}

Dual 8 zoom Projector with slow motion control

Model 788. Just set the conversion lever for Super 8 or Standard 8mm and you are ready to show your favorite films. Projector has forward, reverse, still and fast forward operation. Has separate slow motion control. Automatic sprocketless film threading with takeup control. Sharp f/1.5 zoom lens. Bright quartz halogen lamp. Retractable power cord for easy, compact storage. Automatic room light outlet. 117 VAC.

10 A 5180 U. Wt., 12 lbs..........109.95



32^{95}

Baia Instaview dual 8 Editor

Model 120. Has variable forward and reverse electric drive speeds. Big 12 sq. in. viewing screen. Focusing, framing, frame marker and lamp switch controls. Fast slip-in loading. Full 400′ capacity. Complete with dual reel holders, splicer and tape. For 117 VAC.

10 A 4294 X. Shpg. wt., 10 lbs..........32.95

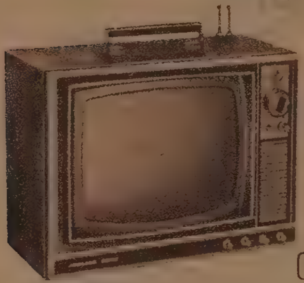
10 A 4296 X. Dual 8 Ediviewer. As above, but crank operation. Wt., 9 lbs..........22.95

Latest color and black-and-white Portables

Shown on optional roll-around cart

A **324.95** less cart

$16 monthly
see page 438



B **269.95**

$14 monthly
see page 438

C **239.95**

$12 monthly
see page 438

A Luxurious 18″ Portable Color T

18″ picture measured diagonally

Sharp. Enjoy true-to-life color on a big 180 s
in. viewing area. Special circuits for insta
picture, instant sound. Preset tuning, 3 I
stages, automatic degaussing and 21,500-vo
picture power assure excellent viewing. UH
VHF antennas. Walnut-grain metal cabine
17½x24⅝x19½″. U.L. Listed. 117 VA
Japan.
10 A 4075 Z. Shpg. wt., 85 lbs.............324.
10 A 0104 L2Z. Above, With Cart. 95 lbs. 339.

B Compact 15″ Color Portable

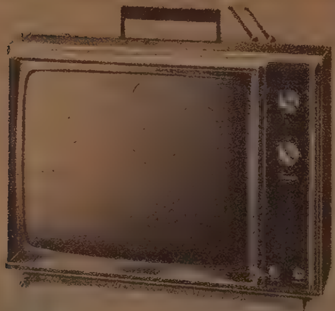
15″ picture measured diagonally

Midland. Get the performance you would e
pect from a console in this compact portab
20,000 volts for brilliant pictures on a 125 s
in. viewing area. Automatic degaussing. 3 I
stages and keyed AGC assure top perform
ance, picture stability. Dual antenna
Walnut-grain metal. 20½x16¼x17½″. U.
Listed. 117 VAC. Japan.
10 A 4355 Z. Shpg. wt., 68 lbs.............269.

C Deluxe 12″ Portable Color TV

12″ picture measured diagonally

Sharp. Lightweight portable with preset fi
tuning . . . set once for each VHF station,
need to reset when you change channel
Keyed AGC, 3 IF stages and 15,000-volt pi
ture power assure bright, stable color on
sq. in. viewing area. Automatic color purifi
keeps colors true. Earphone. Walnut-gra
finish cabinet. 13¼x19x15″. U.L. Liste
117 VAC. Japan.
10 A 5018 Z. Shpg. wt., 42 lbs.............239.

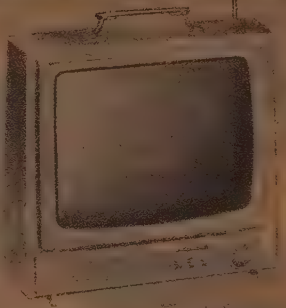


Big-screen 19″ Portable TV

19″ picture measured diagonally

109.95 $6 monthly
see page 438

Family-size portable provides excellent black-and-white pictures on a big 184 sq. in. viewing area. Convenient front-mounted controls, including VHF tuner and 2-speed silicon-transistor UHF tuner. 3 frame-grid IF tubes help pull in strong signals; bonded picture tube cuts reflections. 19,000-volt picture power. 6x2⅜″ speaker. Earphone jack. VHF-UHF antennas. Plastic cabinet, 17x21⅞x13″. With earphone. U.L. Listed. 117 VAC. From Japan.
10 A4067 U. Wt., 42 lbs.............109.95
10 A 4073 U. Above, walnut vinyl, slide-rule UHF tuning. 42 lbs...119.95



"Insta-Vu" 16″ Portable TV

16″ picture measured diagonally

94.95 $5 monthly
see page 438

Get crisp, clear black-and-white pictures and static-free sound the instant you turn set on. 141 sq. in. viewing area; 17,000 volt picture power. High-gain IF amplifier and gated AGC assure top performance, stable pictures. Tunes all VHF-UHF stations. 3″ speaker. Hi-impact ivory cabinet. 17¹³⁄₁₆x16⅝x12³⁄₁₆″. U.L. Listed. 117 VAC. From Japan.
10 A 4357 U. Wt., 27½ lbs.............94.95
10 A 4060 U. 16″ Portable. (Not illus.) 15,000 V. 4x3″ speaker. Slimline. 14½x19⅜x12⅜″. Earphone. U.L. List. 117 VAC. Japan. 30 lbs....99.95

Lightweight 12″ Portable

12″ picture measured diagonally

79.95 $5 monthly
see page 438

Handsome, modern slimline-styl
portable provides clear b&w pictu
on 75 sq. in. viewing area. Special c
cuit design for instant pictures a
sound —no wait for warmup.
13,000 volts picture power. AGC a
AFC circuits maintain, picture stab
ty. Convenient front-mounted co
trols; large 3⅛″ speaker to deliv
clear sound. All-channel VHF a
deluxe vernier UHF tuning. Telesco
ing VHF, loop UHF antennas. W
earphone. 11³⁄₁₆x15¾x10¾″. U.L. Li
ed. For 117 VAC. From Japan.
10 A 4083 U. Wt., 21 lbs..........79.

SHIPPING NOTE: Items with suffix U, W or Z in stock no. sent tr
or express. See Ordering Information pag

Personal and compact Portables

"Minni" 3" battery AC TV

3" picture measured diagonally

109^{95} $6 monthly*

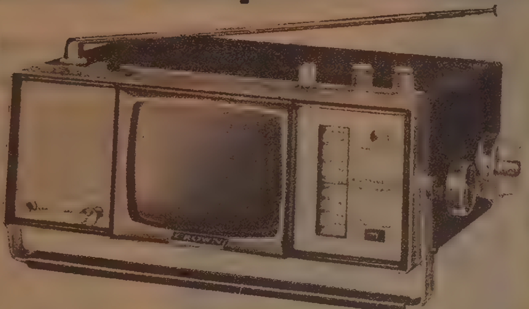
olid-state TV pulls in sharp pictures
1 4.7 sq. in. viewing area. Operates
1 117 VAC, 12 VDC with optional
rd that plugs into car cigarette
ghter, or on 9 "C" batteries. Order
chargeable batteries below. With
C adapter/battery charger, ear-
one. 6¾x3½x6". Japan.

A 4054 S. Wt., 6½ lbs. 109.95

A 4047 S. Rechargeable "C" Batter-
s. Wt., 2 lbs. . . . . .Pkg. of 9 for 14.95

A 4043 S. 12 VDC Cord with Ciga-
tte Lighter Plug. Wt., 12 oz. 5.95

A 4324 S. Leatherette Carry Case
th Sun Visor. Wt., 1 lb. 9.95



4" TV with FM-AM Radio

4" picture measured diagonally

139^{95} $7 monthly*

Versatile portable brings you excellent UHF-VHF TV on a 9 sq. in. viewing area, plus FM-AM radio reception. Solid-state. With AC adapter/charger, earphone. Battery pack or batteries, below. 3¾x9¾x8¼". Japan.

10 A 4321 S. Wt., 11 lbs. 139.95

18 A 5079. "D" Batteries. Uses 9. Shpg. wt., 4 oz. . . . . .Pkg. of 4 for 65¢

10 A 4322 S. Rechargeable Battery Pack. Shpg. wt., 2 lbs. 24.95

10 A 4055 S. 12 VDC Car Cord. Neg. or pos. gnd. Shpg. wt., 1 lb. 5.95

10 A 4102 X. Car Antenna and Stand. Shpg. wt., 3 lbs. 24.95

Panasonic 5" Battery/AC TV

5" picture measured diagonally

129^{95} $7 monthly*

Compact solid-state battery/AC portable TV comes equipped with a built-in set of rechargeable batteries, plus 117 VAC supply/battery recharger. Pulls in movie-clear pictures on 16 sq. in. viewing area. Tinted screen cuts glare. Slide-rule UHF tuning.

AGC circuit keeps picture steady; noise canceller eliminates interference. Compactly-styled to fit anywhere and light enough, only 12 lbs., to get there easily. 9½x6⅜x8¼". VHF-UHF antennas. Power indicator. Earphone. From Japan.

10 A 4266 S. Wt., 17 lbs. 129.95

99^{95} $5 monthly*

attery/AC 9" TV with clip-on sun screen

9" measured diagonally

lid-state black-and-white
rtable TV plays on 117
AC, 12-V car battery or
chargeable battery pack,
low. Provides brilliant
ctures on 38 sq. in. view-
g area. Clip-on sun screen
ts glare for outdoor view-
g. Walnut finish. 8½x
⅝x10¼". With earphone.
L. Listed. Japan.

A 5166 X. 17 lbs. . . .99.95

A 4337 X. Battery Pack.
ttery, Case. 6 lbs. . . .15.95

A 5858. Extra Recharge-
le Battery. 6 lbs. . . .10.62

A 4330 S. 12-VDC Car
rd. Wt., 1 lb. 5.95

109^{95} $6 monthly*

Battery/AC 12" TV with sun screen

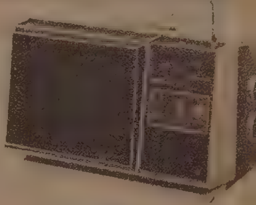
12" measured diagonally

The perfect portable for people on the go. Uses 117 VAC, 12-VDC car or boat battery or rechargeable battery-pack (below). Solid-state, comes on instantly with sharp clear pictures on big 75 sq. in. viewing area. VHF-UHF antennas. Clip-on sun screen, earphone. Walnut-grain finish. 12¾x14½x12⅛". U.L. Listed. From Japan.

10 A 4088 U, 21 lbs. . .109.95

10 A 4337 X. Battery Pack. Battery, Case. 6 lbs. . . .15.95

10 A 4330 S. 12-VDC Car Cord. Wt., 1 lb. 5.95



A 69^{95} $5 monthly* 99^{95} B

Latest 9" black-and-white Portables

9" pictures measured diagonally

A **Low-Priced 9" Portable.** Easy-to-carry portable gives you a bright, clear picture on 45 sq. in. viewing area. Fine VHF-UHF reception; solid-state UHF tuner. 13,000 volt picture power. Only 13 lbs. 10½x14¼x10". Earphone. U. L. Listed. 117 VAC.
10 A 4358 U. Japan. Shpg. wt., 14¾ lbs. 69.95

Compact 9" Portable with "Instant On". (Not illus.) Handsome slimline-styled TV comes on instantly. 11,000-volt picture power. 44 sq. in. viewing area. VHF-UHF antennas. 9¼x13⅜x9¾". Earphone. U.L. Listed. 117 VAC.
10 A 4089 U. Japan. Shpg. wt., 18 lbs. 74.95

B **9" Portable with Built-In Digital Clock.** Perfect bedroom TV. Accurate digital clock includes timer to shut TV off automatically after up to 3 hours. 38 sq. in. viewing area. 12,000-volt picture power. 9¾x15⅛x10⅛". 117 VAC.
10 A 4210 X. Japan. Shpg. wt., 15 lbs. 99.95

ee page 438 for full Credit details

Telex-Phonola Stereos

Your Choice **239^{95}**

Traditional style 42" wide

Large storage space for records

Spanish style 42" wide

Solid-state Stereo Credenzas with record storage space

Impressive credenza with authentic styl ing and choice woods delivers great stere from radio or records. Stereo FM-AM radio has lighted slide-rule dial, stere FM indicator light, built-in antennas Full-feature Garrard changer plays at al 4 speeds. Has 11" turntable, cuing lever adjustable pickup arm, cartridge with diamond stylus, 45-rpm spindle. Maste control panel has separate bass and trebl controls, loudness control, mode selector Amplifier delivers 50-watt peak musi power, has bass-boost circuit. Two 8 woofers, plus two 4" tweeters with cross over network. Jacks are included for tap recording or adding extension speakers Center lift-lid provides easy access t controls, front door opens for recor storage. 28x42x17½". For 117 VAC Shpg. wt., 85 lbs.

10 A 4536 ZF. Traditional (Pecan) . . . 239.95
10 A 4534 ZF. Spanish (Oak) 239.95

Solid-state Stereo FM-AM-Phono Consoles

199^{95} 44" wide

Mediterranean style

Luxurious sculptured pecan finish. Silicon-transistor radio has AFC, mode indicator lights. 4-speed Garrard changer has diamond stylus, 11" turntable, 45-rpm spindle. Bass, treble, balance controls. 25 watts peak. Jacks for tape recording, extension speakers. Two 8" woofers, two 4" tweeters. 27x44x17". 117 VAC.

10 A 4532 ZF. Wt., 70 lbs. 199.95

189^{95} 44" wide

Scandinavian style

Elegantly finished in oiled walnut. Record storage space. Silicon-transistor radio has stereo FM-FM-AM indicator lights, AFC. Bass, treble, balance controls. 4-speed Garrard changer has shutoff, 45-rpm spindle. 25 watts peak. Recording, extension speaker jacks. Two 6" dual-cone speakers. 24¼x44x16½". 117 VAC.

10 A 4537 ZF. Wt., 70 lbs. 189.95

189^{95} 44" wide

Early American style

Authenticlly styled, with maple finish Stereo FM-AM radio has silicon tran sistors, AFC, mode indicator lights Garrard stereo changer has 11" turntable, diamond needle, 45-rpm spindle Bass, treble, balance controls. 25 watts peak. Jacks for recording, ext speakers. Two 8" woofers, two 4 tweeters. 27x44x17". 117 VAC.

10 A 4535 ZF. Wt., 70 lbs. 189.95

Ⓐ **99^{95}** 36" wide

Ⓑ **149^{95}** 36" wide

Ⓐ Compact solid-state Stereo Phono Console

This 20-watt peak music power phono offers good stereo at a reasonable price. 4-speed automatic stereo record changer has low-mass pickup arm, ceramic cartridge with diamond needle 45-rpm adapter. Two 8" speakers offer rich bass. clear highs. Controls: left and right channel volume, tone, channel separation. Record storage space. Walnut finish. 117 VAC. 26¾x36x16¼".

10 A 4556 ZF. Shpg. wt., 50 lbs. 99.95

Ⓑ Solid-state Stereo FM-AM-Phono Console

Handsome console for full stereo entertainment at a bargai price. Solid-state stereo FM-AM radio has dual volume, tone, balance, channel separation controls. 4-speed automatic changer has ceramic cartridge with diamond needle. 45-rpm spindie. Two 8" speakers. 20 watts peak musi power. Record storage space. Built-in FM-AM antennas. Walnut finish. For 117 VAC. 26¾x36x16¼".

10 A 4572 ZF. Shpg. wt., 65 lbs. 149.95

SHIPPING NOTE: All Telex-Phonola models on these two pages sent by express from Rochester, Minnesota. Sorry, no C.O.D. orders.

Solid-state Stereo Consoles

Delmonico Consolette with stereo FM-AM-Phono-8 track cartridge player

omplete solid-state stereo entertainment center a compact oiled walnut cabinet. Stereo FM-M radio has AFC, slide-rule dial, stereo FM ght, built-in antennas. Bass, treble and balance ontrols. 4-speed automatic record changer has ual synthetic-sapphire needles, automatic shut-ff. Built-in 8-track easy-loading cartridge player as channel indicator lights, automatic and anual channel-changing. Ten-watt peak music ower stereo amplifier. Two 6" woofers, two 2½" weeters. 26½x27¾x14¼". 117 VAC. Express om New York City. Shpg. wt., 58 lbs.

0 A 4592 ZF. No C.O.D. Orders..........189.95

Stereo from every source for only

189^95

$10 monthly*

27¾" Wide

Deluxe Telex-Phonola Stereo FM-AM-Phono with 8-track Cartridge Player

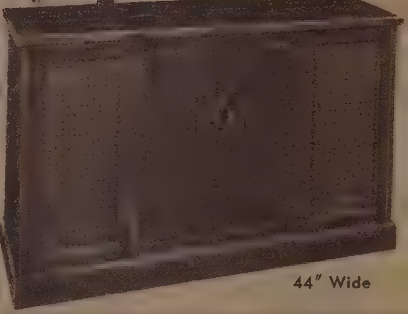
ur finest! Stereo FM, AM, 4-speed stereo hanger, *plus* 8-track stereo tape cartridge play-r. Radio has slide-rule dial, AFC, stereo FM ght. Automatic Garrard changer has full-size 1-inch turntable, diamond stylus, 45-rpm pindle. Built-in 8-track easy-loading cartridge layer has automatic program selector. Solid-tate 24-watt peak music power amplifier. Bal-nce, bass, treble and loudness controls. Two 8" oofers, two 4" tweeters, crossover network. acks for extension speakers. Walnut finish. 27x 4x17". See Shpg. Note on page 532. Wt., 70 lbs.

0 A 4528 ZF. No C.O.D. Orders..........269.95

Our best console.. everything in stereo

269^95

$14 monthly*



44" Wide

Stereo entertainment in unique, versatile cabinetry

Telex-Phonola Stereo FM-AM-Phono in choice of cabinets

169^95

Can be wall-mounted

Early American

Mediterranean

ersatile hutch-type cabinet can be hung on a wall, or laced on shelf or table top. Silicon-transistor stereo FM-M radio has slide-rule dial, bass, treble and balance con-rols, AFC switch for drift-free FM. Automatic record hanger with full 11" turntable, diamond stylus, 45-rpm pindle, tubular arm. Two 6" high-compliance speakers. 5 watts peak music power. With wall-mounting brackets. 6¼x37x9". For 117 VAC. Shpg. note on page 532.

0 A 4529 ZF. Mediterranean (Oak). Wt., 50 lbs......169.95

0 A 4530 ZF. Early American (Maple). Wt., 50 lbs....169.95

ompact 3-pc. Stereo FM-AM-Phono

omponent-type stereo compact at a budget rice. 16-watt-peak amplifier and separating " speaker systems give you a "wall" of stereo ound. Stereo FM-AM radio has bass, treble, alance controls; AFC switch, stereo FM dicator light, head phone jack. Lighted slide-ale dial with "black-out" feature. Four-peed BSR Mini-Changer mixes 10", 12" rec-rds. Inputs for external antenna and tape. ith dust cover. Radio/changer, 17¼x10½x ¼". Walnut-finish wood cabinetry 5⅜x ⅛x7¼". 117 VAC. Imported.

0 A 4350 U. Shpg. wt., 17 lbs.........129.95

129^95 $7 monthly*

See page 438 for full Credit details

56⁹⁵
$5 monthly*

G.E. "Mustang II" Portable Phono

Easy-to-carry solid-state phono has drop-down 4-speed automatic changer. Stereo ceramic cartridge with dual synthetic-sapphire styli. Features two 4" Dynacoustic speakers that separate to 12-ft. Attractive simulated walnut grain grille exteriors. Top-mounted volume, balance and tone controls. Automatic shutoff. With 45-rpm spindle. Hi-impact green polystyrene case. 14½x19x7". U.L. Listed. For 117 VAC.
10 A 4032 U. Shpg. wt., 23 lbs............56.95

59⁹⁵ $5 monthly*

Portable Stereo Phono in wood cabinet

Handsomely-styled portable phono boasts walnut-vinyl covered wood cabinets. Speaker enclosures separate to 24-ft. Drop-down 4-speed changer features automatic record-size intermix, automatic shutoff. Stereo cartridge with dual synthetic-sapphire styli. Left and right channel volume controls, tone control. Solid-state stereo amplifier. With 45-rpm adapter. 12¼x23½x5¼". U.L. Listed.117 VAC.
10 A 4125 U. Shpg. wt., 25 lbs..........59.95

46⁹⁵
$5 monthly*

Popular G.E. "Wildcat" Stereo Phono

Compact solid-state portable has trimline styling with drop-down 4-speed changer. Plays up to 6 records. Automatic shutoff. Ceramic cartridge; dual synthetic-sapphire styli. Two built-in 6" oval speakers. Volume, balance, tone controls. Beige polystyrene case. 14x22x7¼". With 45 rpm spindle. U.L. Listed. 117 VAC.
10 A 4507 U. Shpg. wt., 18 lbs..............46.95

Solid-state Stereo Phonos

Ⓐ Portable Stereo Phono with Stereo FM-AM

Complete, compact portable music system for exciting stere listening anywhere. Attractive pecan-vinyl covered wood cabinet Two detachable high-compliance air-suspension speaker system for full, natural sound. Drop-down stereo changer has low-mas tubular pickup arm for sensitive tracking. Plays all 4 speeds Automatic intermix and automatic shutoff. Stereo cartridge ha diamond stylus. Solid-state stereo FM-AM radio boasts silico transistors for greater sensitivity. Slide-rule dial, mode beaco lights. Volume, balance, tone controls. With 45-rpm spindle 14½x30½x7". U.L. Listed. 117 VAC.
10 A 4135 U. Shpg. wt., 35 lbs.......................139.9

Ⓑ Component-type Stereo FM-AM-Phono Compac

Dramatically-styled in select oiled walnut solids and veneers with translucent smoked side panels and dust cover. Up-to-dat appearance looks smart in any surrounding. Matching air-suspension speaker systems provide rich, full-fidelity sound. Custom 4-speed stereo changer features cuing lever and pickup arm weight adjustment for superb tracking. Stereo cartridge with diamond stylus. Includes 45-rpm spindle adapter. Stereo FM-AM radio provides excellent reception of your favorite programs Brings you thrilling stereo and crisp, clear mono. Silicon solid-stat circuit. Jacks for tape and extension speakers. Slide-rule tuning volume, balance, tone controls. 10½x22x15½". Speakers, 9½x 7½x6½". U.L. Listed. 117 VAC.
10 A 4152 U. Shpg. wt., 50 lbs..........................179.9

Ⓒ Deluxe solid-state portable Stereo Phono

Top-quality drop-down 4-speed stereo changer in a striking vinyl-covered wood cabinet offers exceptional features and performance Big 11" turntable, platter, adjustable pickup-arm weight. Stere cartridge has diamond stylus. 45-rpm spindle adapter. Solid-stat stereo amplifier with bass boost for full sound. Two matching wide-range air-suspension speaker systems separate for full stere effect. Left and right volume, bass/treble controls. 15¼x19½x 8½". Speakers, 14½x9¾x4½". U.L. Listed. For 117 VAC.
10 A 4095 U. Shpg. wt., 40 lbs...........................99.9

Ⓓ Custom-styled compact 4-speed Stereo Phon

Magnificent solid-state stereo phono features unique "swing-out" styling; changer swings down for use, up and out-of-the way fo carrying or when not in use. Amplifier delivers a powerful 40-wat peak power output to two detachable speaker systems, each with an 8" woofer and 4" tweeter. Speakers separate to 24-ft. for fines stereo effect. Precision 4-speed changer boasts cuing lever, low-mass arm with weight adjustment, automatic intermix, 11" platter, automatic shutoff. Stereo cartridge with diamond stylus. 45-rpm spindle adapter. Separate bass, treble controls; dual loudness balance. Walnut-vinyl covered wood cabinetry, 14x22x7¼" speakers, each 14x11x4½". U.L. Listed. For 117 VAC.
10 A 4096 U. Shpg. wt., 48 lbs.........................129.9

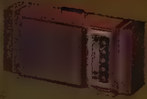
Ⓔ Compact solid-state portable Stereo Phono

A real party-maker anywhere you go. Slimline styling with split-lid design; matched high-compliance 4" speakers in lid separat to 24-ft. for best stereo. 4-speed stereo changer has automati intermix, automatic shutoff. Stereo cartridge with dual synthetic sapphire styli. Right and left channel volume; dual tone controls Wood cabinet with walnut-vinyl and egg-white accent. 9½x18¼x 13". U.L. Listed. For 117 VAC.
10 A 4116 U. Shpg. wt., 20 lbs...........................69.9

Ⓕ Solid-state 4-speed Stereo Phono

A winning combination of style and sound. Drop-down 4-speed stereo changer features low-mass tubular arm for lighter tracking reduced record wear; automatic intermix and shutoff; 45-rpm spindle. Detachable 6" wide-range speakers separate to 24-ft. Has left and right channel volume and bass/treble controls Sturdy wood cabinet covered with charcoal gray vinyl, walnut accents. 18x16x11". U.L. Listed. 117 VAC.
10 A 4087 U. Shpg. wt., 28 lbs...........................79.95

**See page 438 for full Credit details*

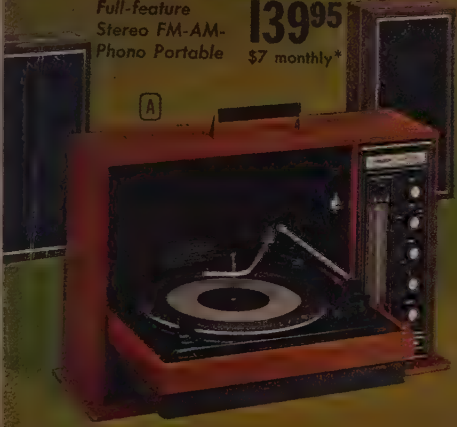


Latest from Telex-Phonola

Full-feature Stereo FM-AM-Phono Portable

139^{95}

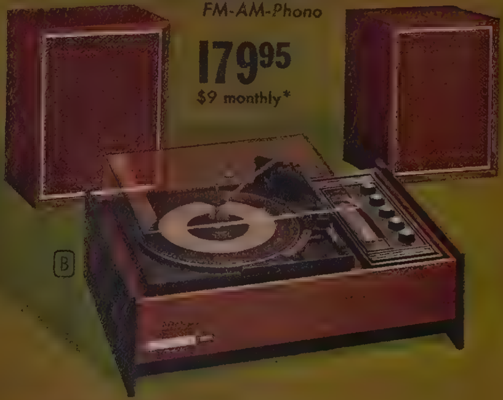
$7 monthly*



Component-styled Stereo FM-AM-Phono

179^{95}

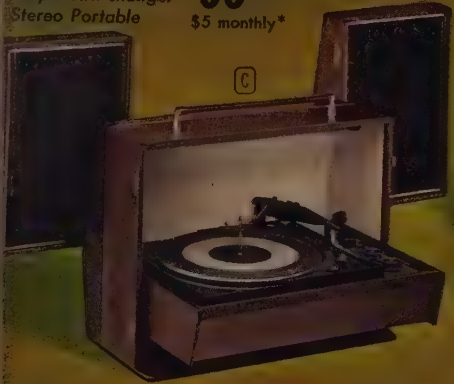
$9 monthly*

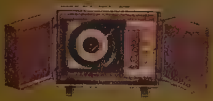


Deluxe 4-speed drop-down-changer Stereo Portable

99^{95}

$5 monthly*

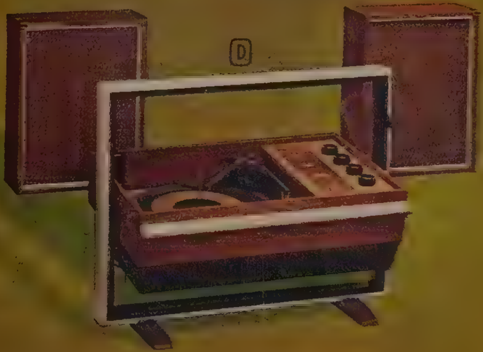




Modern Stereo Phono features unique styling

129^{95}

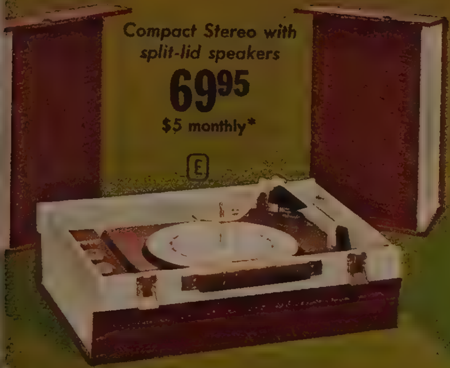
$7 monthly*



Compact Stereo with split-lid speakers

69^{95}

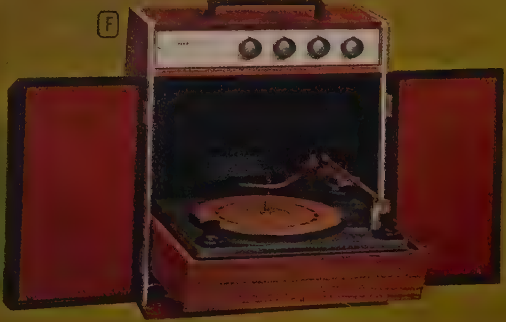
$5 monthly*



Smartly-styled Stereo Phono with drop-down changer

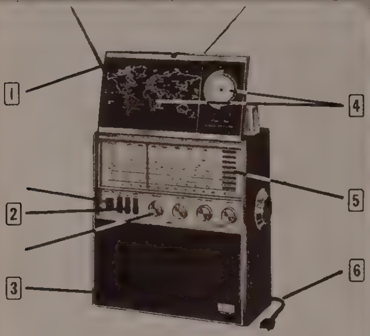
79^{95}

$5 monthly*



e page 438 for full Credit details

Allied® police/public service Radios . . no others tune in so much excitement at prices this lo



1. Telescoping FM-VHF antennas
2. S/battery meter, rocker switches
3. Full-tone 6x4″ speaker
4. World time map in folding lid
5. Indicator lights show band in use
6. Built in AC cord and plug

Our finest Allied FM-AM-SW-VHF Portable Radi

TUNES 8 BANDS

540-1600 kHz standard AM broadcast band

1.7-5 MHz medium wave for Marine calls

5-12 MHz shortwave foreign stations, Hams

12-24 MHz shortwave foreign stations, Hams

88-108 MHz FM broadcast for static-free music

30-50 MHz VHF police/public service band

107-136 MHz VHF aviation band for aircraft

147-176 MHz VHF police/public service band

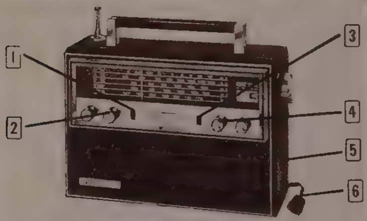
Model 2682. This solid-state 8-band portable is loaded with excitin
extras. *89 Magazine* says: "If you like the idea of having a uniqu
portable radio that can cover just about everything you'll find you
dreams answered in the 2682." And it plays anywhere on 4 "D
batteries or 117 VAC. Fine-tuning separates stations on crowded S
bands. Squelch control silences radio between calls on VHF. Slide
rule dial with momentary light, band indicator lights.

Automatic Noise Limiter, AFC, tone switches. Tuning/battery con
dition meter. Local/distance switch. Dual 27″ VHF-SW-FM anter
nas, built-in AM-marine antenna. Motorola-type jack for extern
SW antenna. 19 transistors, 7 diodes. Leatherette-covered case, 12⅝
9⅝x4½″. With batteries, earphone, SW station list. Japan.

10 A 4230 U. Shpg. wt., 15 lbs. 89.5

18 A 5079. Extra "D" Batteries. Shpg. wt., 10 oz. . . . . . **Pkg. of 4 for 65**

Takes Accessories Listed Below



1. Dial light on-off Switch
2. Variable Tone Control
3. AFC Switch for drift-free FM
4. Fine-tuning control for SW
5. Motorola-type SW antenna jack
6. Self-storing AC cord and plug

Our best selling Allied FM-AM-SW-VHF Portable

TUNES 5 BANDS

540-1600 kHz standard AM broadcast band

5-12 MHz shortwave foreign broadcasts, Hams

88-108 MHz standard FM

108-135 MHz VHF aviation band for aircraft and local airports

147-175 MHz VHF police/public service band

Model 2671. Full-feature portable plays anywhere on 4 "C" batteri
or 117 VAC. Includes: fine-tuning control, AFC, 3x6″ speaker, slid
rule dial with momentary pushbutton light. Telescoping FM-VH
antenna, built-in AM-SW antennas; Motorola-type jack for SW a
tenna. 15 transistors. Leatherette case. 7⅜x10½x3″. Japan.

10 A 4362 X. Shpg. wt., 9 lbs. . . . . 49.

18 A 5078. Extra "C" Batteries. Shpg. wt., 10 oz. . . . . . **Pkg. of 2 for 3**

11 A 1749. Deluxe SW Antenna. With Motorola-type plug. 4 lbs. . . 7.

11 A 1239. Economy SW Antenna Kit. 100′ wire, accessories. 2½ lbs. 2.

10 A 4051 S. Motorola-type Antenna Adapter Plug. Wt., 1 oz. 1

23 A 7538. "ABC's of Shortwave Listening." by Len Buckwalter (Sam
96 pages of valuable shortwave listening information. 12 oz. . . . . 2.

YOU CAN HEAR ALL THIS ON THE VHF BANDS

30-50 MHz and 147-175 MHz Police/Public Service Bands: Police, fire, emergency services; industrial and business radio; continuous weather on 162.55 MHz in many larger U.S. cities. 108-135 MHz Aviation Band: planes, local airports, navigation stations. Frequencies may vary in different parts of the country, so check locally for exact frequencies in your area. The closer you are to a major highway, airport, harbor or other source of VHF, the more you will hear. Calls are of short duration with random elapsed time between them. TV audio may be heard in many parts of the nation.

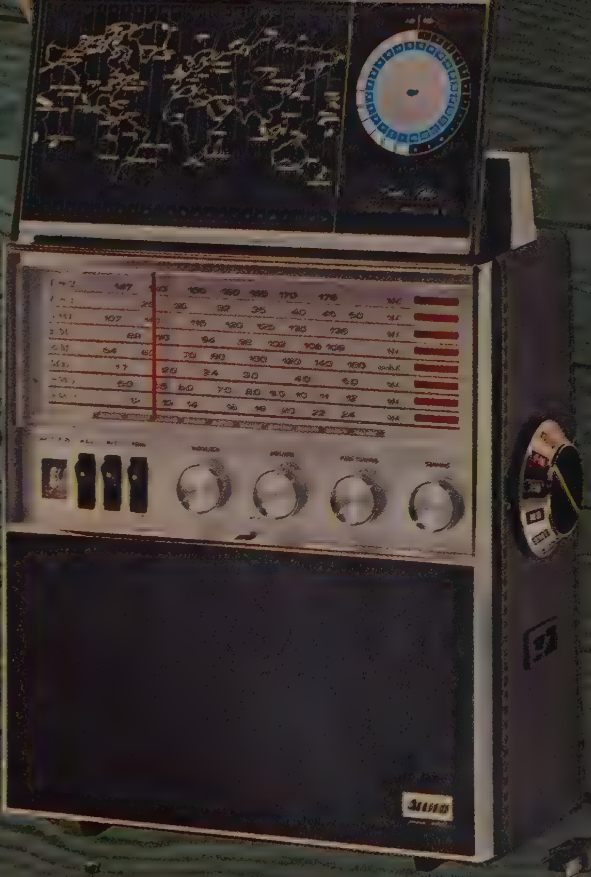
Buy either of these portables for only $5 monthly . . see page 438 for deta

8-band Portable tunes both police/public service bands

"Portability, frequency coverage with some unique features, and price make this portable radio a good buy."

S9 MAGAZINE

89^{50}



Shown
closed

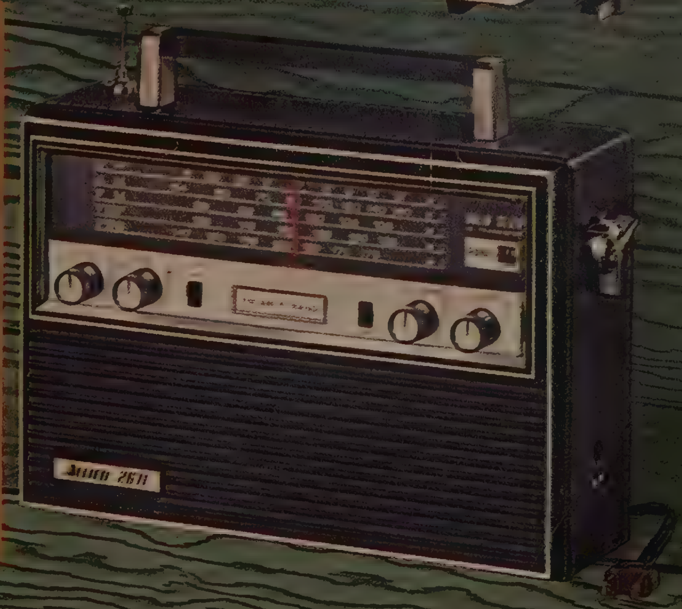
5-band Portable tunes police/public service bands

". . . wide-range coverage, there isn't anything going on that you don't intercept . . . performed perfectly in tests . . . one of the best buys around."

POPULAR ELECTRONICS

Was $59.50 in Cat. 280

49^{95}



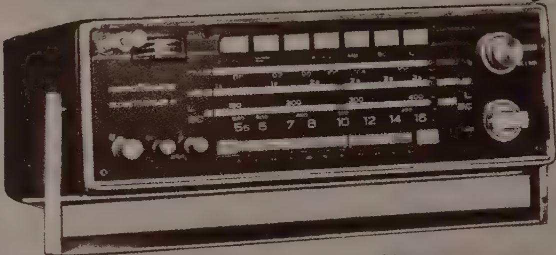
Enjoy these Car-Portables anywhere

Our best Car-Portable . . has 15 bands, battery/AC

Cut $30.00

159^{95} **$8 monthly***

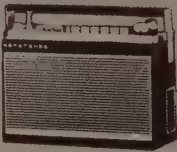
Was $189.95 in Cat. 285



15 BANDS

FM, AM, longwave,
marine, plus eleven
shortwave bands

Deluxe portable radio cov
ers all these frequencie
standard AM broadcas
band, 550-1650 kHz; FM
band, 88-108 MHz; long
wave band, 145-420 kHz
marine band, 1.5-3.6
MHz; plus eleven majo
international broadcas
shortwave bands fron
3.61-22.10 MHz. Full dia
bandspread on all dial
Includes 80, 40, 20 an
15-meter Amateur band



Nordmende Globetraveler III. Covers FM, AM, longwave, marine and *eleven* SW bands (right). Full drum dial bandspread for all 11 SW bands; IF bandwidth switch; 4 IF stages on FM, 3 on SW; battery/tuning meter; separate bass, treble controls; lighted dials. AFC, built-in AC, 5x7" speaker; 2½" tweeter. Plays on 5 "D" batteries (below); 117 VAC; 6 or 12-V pos. or neg. gnd. car battery. Dual telescoping antenna. SW antenna. Phono jacks; amp, recorder outputs. Vinyl-covered wood cabinet, 8½x12⅛x4". Bracket below.

10 A 5066 X. Imported. Shpg. wt., 11 lbs. 159.95
10 A 4344 X. Lockable Car Bracket. Shpg. wt., 5¼ lbs. 19.95
18 A 5079. "D" Batteries. Uses 5. Shpg. wt., 12 oz. . . . . **Pkg. 4/65¢**

99^{95}
$5 monthly*

These solid-state Portables can be played in cars, boats or at home

Panasonic FM-AM Radio/Cassette Recorder

Great for car, boat or home use, or carry it with yo
anywhere. Plays on 5 "D" batteries, or on 6 or 12 VD
pos. or neg. gnd. car battery and antenna with options
mounting bracket (below). You can order 117 VAC adapte
for home use, too (below). Records and plays up to tw
hours on standard cassettes. Record directly from radi
or "live" with mike. Features record level meter, accurat
vernier tuning, AFC on FM, tone control, big 6x4" speake
Power output, up to 2 watts. Has ferrite AM and tele
scoping FM antennas. Size, 3½x11x11". With batteries
mike and earphone. Order extra batteries above, left
From Japan.

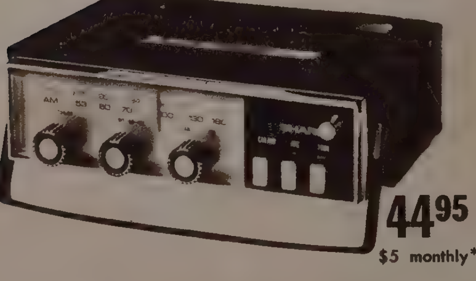
10 A 4002 S. Shpg. wt., 11 lbs. **99.9**
10 A 4006 S. Mounting Bracket, Lock, Key. 4 lbs. **19.9**
10 A 4280 S. AC Adapter. For 117 VAC. Wt., 1 lb. **9.9**

54^{95}
$5 monthly*

3-band FM-AM-VHF car/portable/home Radio

Compact three-band radio pulls in standard FM and AN
broadcasts. Also tunes VHF 148-174 MHz Police/Publi
Service band for police, fire, emergency services, utilities
taxis, trains, etc. Tunes 162.5 MHz Weather Informatio
service heard in many urban areas. Plays on three "C
batteries, 6 or 12 VDC pos. or neg. gnd., or 117 VA
Connects to car antenna. Dial lights up when used in ca
Pushbutton AFC. Vernier slide-rule tuning. Peak powe
output when used in car, 2 watts. Speaker, 4⅜x2¾
Overall size, 7½x5⅛x2". With mounting bracket for ca
lock and key, AC cord, batteries and earphone. U.L
Listed. Order extra batteries below. From Japan.

10 A 4594 S. Shpg. wt., 5 lbs. **54.9**
18 A 5078. Extra "C" Batteries. Wt., 10 oz. . . . . . . **Pkg. 2/33**



44^{95}
$5 monthly*

Versatile FM-AM car/portable/home Radio

Versatile FM-AM radio locks into bracket under das
operates on 6 or 12 VDC pos. or neg. gnd. car batter
Out of car it's a portable, indoors it's a plug-in! Operat
on 3 "C" batteries or 115 VAC. Features AFC on FM
pushbutton tone control, big 4" speaker. Has AFC and R
circuit. Ferrite AM and telescoping FM antennas plu
~~pushbutton for car/antenna~~ jack. ~~Pilot light turns on whe~~
used with car battery. 7⅝x5⅛x2". With mounting brack
for car, lock, key, batteries, AC cord and earphone. U.
Listed. Extra batteries above. Japan.

10 A 4154 S. Shpg. wt., 5 lbs. **44.9**

**Full Credit details on page 438 . . Buy with no money dow*

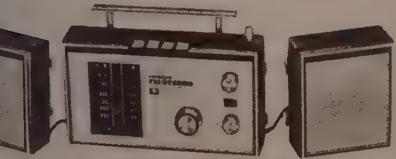
xciting Radios feature latest modern designs

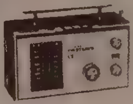
ece Stereo FM-AM with digital clock

ue digital clock/stereo
in all-wood cabinetry

99^{95}
$5 monthly*

gine! Unique digital clock wakes you to FM, AM radio, or alarm. Has lighted stereo indicator light. Controls for bal-, bass, treble, function, tuning, AFC. atts peak music power. Inputs for phono, rnal speaker, antenna. Two 5″ speaker ms separate up to 12 feet for full stereo sm. Barrel-type dials for alarm time, , minutes, seconds. Handsome walnut wood cabinets with brushed aluminum . Radio, $3\frac{1}{8}$x$16\frac{1}{2}$x$9\frac{1}{8}$″; matching speak-$9\frac{1}{8}$x$7\frac{1}{4}$x$5\frac{3}{8}$″. With FM antenna. For VAC. Japan.
4000 U. Shpg. wt., 13 lbs..........**99.95**





69^{95} $5 monthly*

attery/AC Stereo FM-AM

chi. Two 4″ speakers detach for stereo effect, fold behind cabinet carrying. Entire unit less than 5 300-mW peak music power. Stereo cator light, built-in AFC, tone rol. AM, telescoping FM anten- Leatherette-covered. $5\frac{1}{2}$x$9\frac{5}{8}$x (closed). With 117 VAC adapter, ” batts., 2 earphones (jacks).
4118 S. Japan. 6 lbs........**69.95**
4671 S. As above, but speakers detachable. Less 117 VAC adapter, hones (below). 5 lbs........**49.95**
4364 S. AC Adapter. 6 oz.....**4.95**
4759 S. Earphone for above. (Use stereo.) Wt., 6 oz......**Each 1.95**

49^{95}
$5 monthly*

FM-AM Clock-Radio/Lamp

Smartly styled clock-radio/lamp combination ideal for bedside or desk. Full-feature Telechron clock keeps precise time—wakes you to music or alarm, lulls you to sleep at night. Solid-state FM-AM radio has AFC to eliminate annoying FM drift. $3\frac{1}{2}$″ speaker delivers excellent sound. Slide-rule dial for easy tuning.

High-intensity lamp adjusts to three intensities. Telescoping-swivel arm lets you pin-point light beam to exact position desired. Ivory base with attractive rosewood trim. Size, 10x$6\frac{3}{4}$″. For 117 VAC. Japan.
10 A 4373 S. Shpg. wt., 6 lbs.....**49.95**

89^{95} $5 monthly*

With FREE headphones for private listening

Five-band table Radio

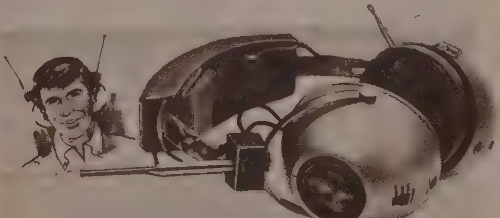
Deluxe solid-state table radio offers coverage of 540-1600 kHz AM; 88-108 MHz FM; 23-channel Citizens Band; 108-135 MHz Aircraft Band and 149-173 MHz Police/Public Service Band. Features big 5″ speaker for good sound. Tuning meter, squelch control, switchable AFC, illuminated slide-rule dial, precise logging scale, and smooth flywheel tuning.

Has separate power switch—no need to interfere with volume control setting. Stylish walnut-finished wood cabinet. Size, $8\frac{3}{4}$x$14\frac{1}{2}$x$6\frac{1}{2}$″. For 117 VAC. With headphones. Japan.
10 A 5045 U. Shpg. wt., 17 lbs...**89.95**

24^{95}
$5 monthly*

Two-speaker wood cabinet FM-AM Radio

Monophonic table radio features two speakers, ″ and $2\frac{3}{4}$″ oval dynamic, for good sound reproduction. Switchable AFC locks-in FM stations, prevents drift. FM circuit has four IF transformers; AM circuit has three. Tone control. Illuminated slide-rule dial. Handsome walnut-finished wood cabinet, chrome trim. 5x$11\frac{1}{2}$x$4\frac{1}{4}$″. 117 VAC. Imported.
0 A 4209 S. Shpg. wt., $4\frac{1}{2}$ lbs...............**24.95**



75^{00}

Stereo FM Headset-Radio

Panasonic. *Super-portable* FM radio built *into* a stereo headset for greatest possible stereo channel separation. Stereo/mono pushbutton; 3-pos. vol. switch; $2\frac{1}{2}$″ speakers. Telescoping antennas. Outputs for use as tuner. Adjustable headband, vinyl/foam earcushions. With 3 "AA" batteries. Japan.
10 A 5105 S. Shpg. wt., $1\frac{3}{4}$ lbs...............**75.00**
18 A 5083. Extra "AA" Batteries. Wt., 6 oz....**2/27¢**

A

Battery/AC 6-band Radio

FM, AM, marine, shortwave plus VHF police and aircraft bands†

89^{95}

$5 monthly*

B

Battery/A 5-band Ra

Tunes FM, A marine band shortwave, V police band

59^{95}

$5 monthly

C

Battery/AC 5-band Radio

Hear FM, AM, SW, both VHF police/public service bands†

54^{95}

$5 monthly*

D

Battery/A 3-band Rad

Unique model receives FM, A and 162.55 M weather data

44^{95}

$5 monthly*

E

Battery/AC 4-band Radio

Listen to your favorite FM-AM stations plus SW and marine

49^{95}

$5 monthly*

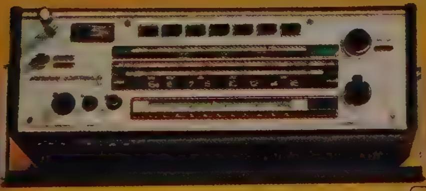
F

Battery/ 3-band Ra

Pulls in FM, and local V police/publi service band

39^{95}

$5 monthly



G

Coverage Includes: FM, AM, longwave, marine, VHF police/public service† plus international shortwave on eleven bands

Battery/AC 16-band Radio

Our best portable radio offers wide coverage and many extra-deluxe features

189^{95}

$10 monthly*

H

Battery/ 3-band Ra

Good recep on FM, AM and VHF police band

32^{95}

$5 monthly

*See page 438 for full Credit details . . buy with no money do

Multiband solid-state Portables

-Band FM-AM-MB-SW-Air-Police. Enjoy hours of entertaining istening with this fine portable. Covers FM, AM, 2.5-6.5 MHz ine, 9-18 MHz SW, 148-174 MHz VHF police/PSB† and 107-136 z aircraft bands. Plays on 6 "C" batteries or 117 VAC. Slide-rule , fine-tuning, AFC switch, squelch control, 4x6" speaker, dual scoping antennas and antenna wire for shortwave. World map time chart in lid. Jacks for external SW antenna (included), dphone and earphone. Plastic case with leatherette padded die- sides. With batteries, earphone, 8⅞x11¾x4½". Japan.
4315 X. Shpg. wt., 10 lbs. **89.95**

-Band FM-AM-SW-Police. Standard FM-AM, 1.8-4.5 MHz narine band, 4.5-12 MHz SW and 148-174 MHz VHF police/ lic service band†. Slide-rule tuning dial, fine-tuning control on . Big 4" speaker. AFC switch locks in FM stations; squelch control inates background noise when monitoring police band. Tone rol. Ferrite and telescoping antennas; jacks for external antenna luded) and earphone. Versatile portable plays anywhere on 6 batteries or 117 VAC with self-storing cord. With batteries, hone. 10x11¾x4". Japan.
4317 S. Shpg. wt., 8 lbs. **59.95**

-Band Tunes FM-AM-SW Two VHF Police/Public Service Bands. Ex- iting listening on 30-50 MHz and 146-175 MHz VHF police/ lic service bands†, plus international shortwave on 6-18 MHz and dard FM-AM. Plays anywhere on 4 "C" batteries or self-storing VAC cord. Slide-rule dial with pushbutton band indicator lights. speaker. Built-in ferrite and telescoping 37½" antennas. Com- vertical styling. Die-cast front, leatherette case, leather handle. 10x3¾". With batteries, earphone. From Japan.
4409 S. Shpg. wt., 8 lbs. **54.95**

M-AM/Weather Station Portable. The perfect portable for boaters, ampers, or anyone. Just press a button for the latest, up-to-the- ate weather reports from the 162.55 MHz U.S. government her station (heard in many metropolitan areas). Also enjoy FM M. Plays on 4 "C" batteries or 117 VAC. 800 mW output ugh 3½" speaker. Rugged construction, folding metal handle. buttons for band selection and AFC. Slide-rule dial, tone switch, te and swivel telescoping antennas. With batteries. 6¼x9½x . From Japan.
4670 S. Shpg. wt., 4 lbs. **44.95**

Band FM-AM-MB-SW. Hear your favorite FM and AM stations, nip-to-shore radio and maritime calls on 2.5-6.5 MHz marine l, and international shortwave on 9-18 MHz. Plays on batteries 17 VAC with self-storing cord. Slide-rule dial, fine-tuning con- tone control, AFC switch, 4" speaker. Built-in ferrite and tele- ing antennas, jack for external antenna (included). Case has ut grain panels. 9¼x11⅛x4". Batteries, earphone. Japan.
4318 S. Shpg. wt., 7½ lbs. **49.95**

M-AM-VHF Police Band Portable. Three-band radio brings you ramatic coverage of the 147-174 MHz VHF police/public service l†, plus FM and AM. Plays on 4 "C" batteries or 117 VAC. ical slide-rule dial with smooth vernier tuning, momentary dial button. Tone switch and 4" speaker for good sound. Squelch rol eliminates background noise on VHF. Ferrite and telescoping nnas. Plastic case, folding metal handle. 6¾x9⅝x2⅝". Batteries, hone. Japan.
4279 S. Shpg. wt., 4½ lbs. **39.95**

ur Finest! 16 Bands Including Police/Public Service. Globetravler IV ortable tunes FM, AM, 1.5-3.7 MHz marine, 145-420 kHz LW 147-174 MHz VHF police/public service band† on large slide-rule Separate rotating drum dial for shortwave from 3.61 to 22.10 in eleven spread bands. Separate dial light switches. Provides rb performance anywhere on 5 "D" batteries or 117 VAC. Has andwidth switch, AFC, 4-watt audio power, tuning meter, bat- tester. Separate bass and treble controls, 5x7" woofer and 2¼" ter for fine sound. Ferrite and dual telescoping antennas; jacks for nal antenna and ground. Earphone and headphone jacks. Ex- on speaker, phono, tape, amplifier jacks. Attractive vinyl-cov- wood cabinet. 8¼x13¼x4⅛". Batteries below. Imported.
4354 X. Shpg. wt., 12 lbs. **189.95**
5079. "D" Batteries. Shpg. wt., 12 oz. . . . . **Pkg. of 4 for 65¢**

M-AM-Police Portable. Compact radio tunes FM, AM and 144- 4 MHz VHF for police/public service band and 2-meter Amateur . Uses 4 "AA" batteries or 117 VAC with self-storing cord. e slide-rule dial, thumbwheel volume and tuning controls. AFC nts FM drift; AVC for constant volume level. Built-in ferrite telescoping FM-VHF antennas. Brown vinyl case with chrome 10x6½x4½". With batteries, earphone. Japan.
4347 S. Shpg. wt., 3½ lbs. **32.95**

8 Bands

99^{95}

$5 monthly
see page 438

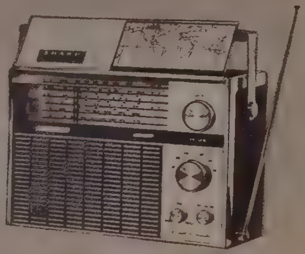
Battery/AC Portable Radio

Pushbutton band selection for FM, AM, 150-350 kHz LW, 1.6-3.6 MHz marine, 3.7-9 and 9-22 MHz SW, plus 108-136 MHz VHF aircraft and 148-175 MHz VHF police/ PSB†. Slide-rule dial, fine tuning control, dial light, tone control, AFC switch. Die-cast front panel, black leatherette case. 4 "D" batts., earphone. 10x14¼x5". Japan.
10 A 4186 X. Shpg. wt., 12 lbs. **99.95**

6 Bands

84^{95}

$5 monthly
see page 438



Battery/AC FM-AM-LW-SW Radio

Covers FM, AM, 145-380 kHz LW, shortwave on 3 bands: 1.6-4.3, 3.9-12, 12-26.5 MHz. Has BFO for code reception, slide-rule dial, fine-tuning, dial light, AFC, tuning/ battery meter, world time map in lid. Telescoping antenna; ext. ant. jack. Rugged die-cast case. 8 "D" batteries, earphone, AC cord. 8¼x12x4¾". Japan.
10 A 4282 U. Shpg. wt., 15 lbs. **84.95**

3 Bands

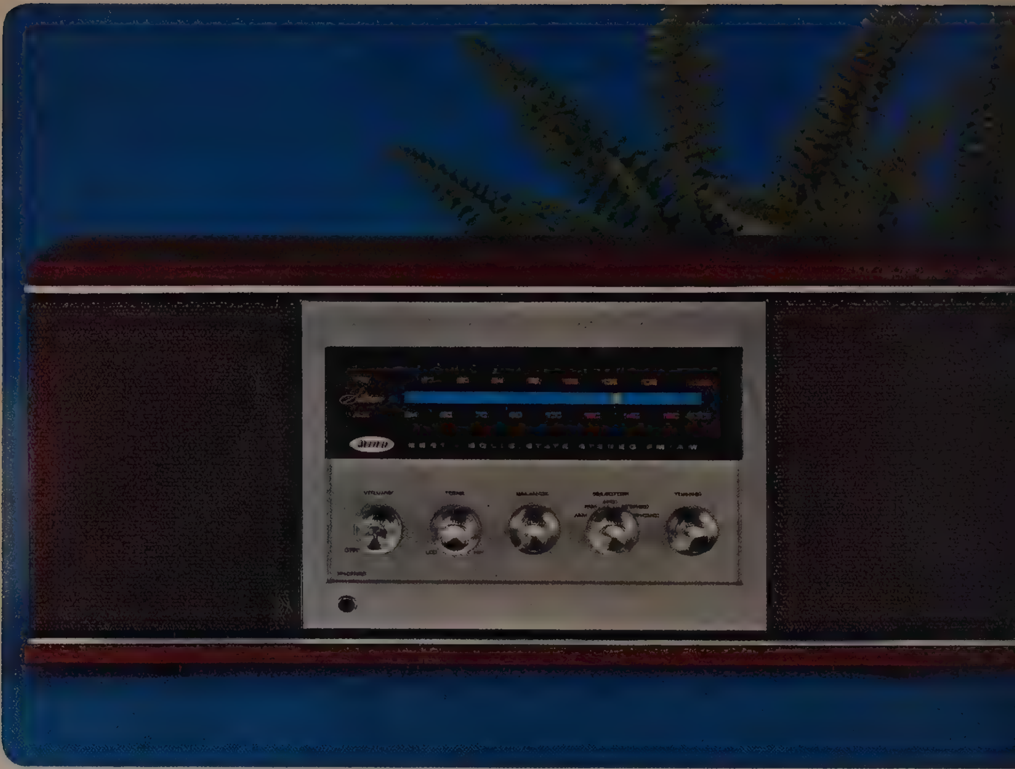
39^{95}

$5 monthly
see page 438

Radio with AM and two VHF bands†

Listen in on both 30-50 and 147-174 MHz VHF police/public service bands, plus AM. Plays anywhere on 6 "C" batteries or 117 VAC. Squelch control eliminates noise when monitoring VHF. Slide-rule dial, 3½" speaker. Ferrite AM, telescoping VHF antennas; external antenna jack. 6¾x9¼x3½". With batteries, earphone. From Japan.
10 A 4044 S. Shpg. wt., 4¼ lbs. **39.95**

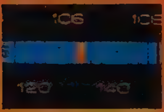
Public service bands cover police, fire, emergency services, utilities, etc. The closer you are to a city, highway or airport, the more VHF you will hear. Calls are short and intermittent. 162.5-MHz weather station is heard in many urban areas.



QUALITY FEATURES

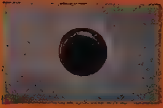
Balance control lets you adjust for best stereo

Stereo Headphone jack for private listening



Easy tuning with illuminated slide-rule dial

Smartly styled oiled walnut wood cabinet



Stereo crystal phono input for playing records

Allied® one-piece Stereo FM-AM Radi with headphone jack and wood cabine

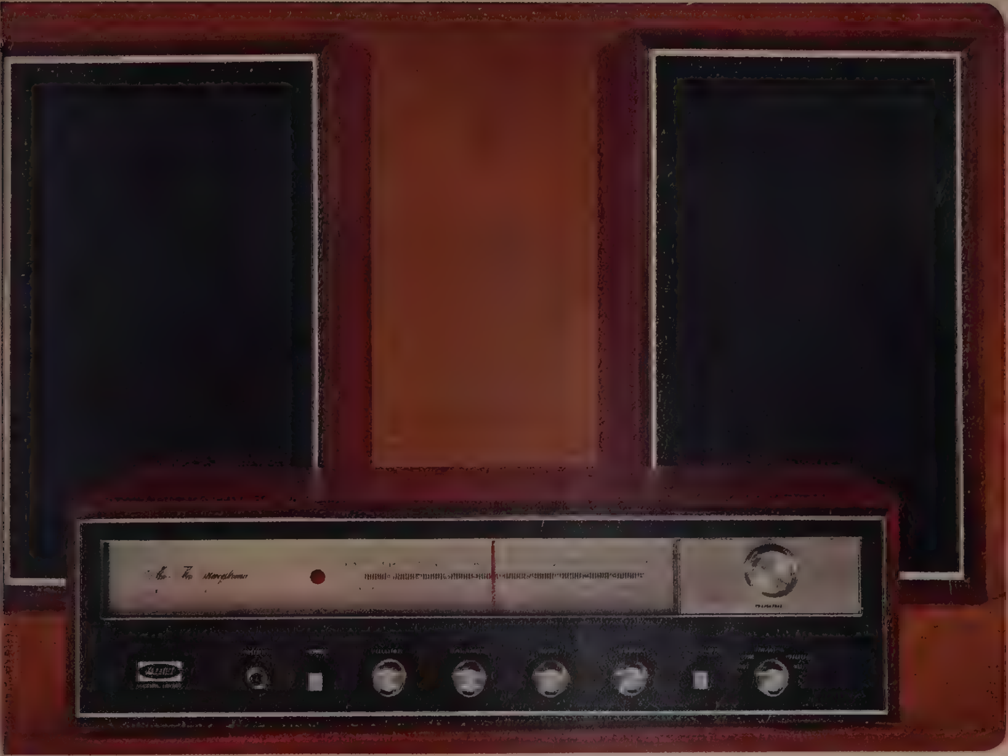
59 95 $5 monthly*

Solid-state stereo at a low price . . 6-watt peak power, plus two 4″ speakers in a compact all-wood cabinet with oiled walnut finish . . includes a balance control for greatest stereo realism

Model 2691. Never before have we offered an Allied stereo FM-AM radio a price this low. But we haven't skimped on quality or features, because t radio gives you important extras you wouldn't expect in a table model. E the cabinet is outstanding. It's all-wood and acts as a "sounding board" improve the tone of the twin 4″ speakers, and has a smart oiled walnut fin Compact size too, for use on bookshelf or table-top.

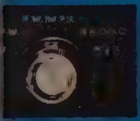
Solid-state circuit delivers 6 watts of peak power (1½ watts per chan rms) for plenty of volume without distortion. Pulls in static-free stereo F with good channel separation, plus fine-sounding AM. Tone control lets y emphasize bass or treble response. Balance control permits easy adjustment equal volume from each speaker, important for maximum stereo effect. A fr panel jack lets you plug in stereo headphones for listening to stereo, at volume, even at midnight, without disturbing anyone. A stereo FM indica light flashes on to show when you're tuned to a stereocast. AFC locks in F stations to prevent drift, may be switched off to aid in tuning weak statio Illuminated slide-rule dial makes tuning all stations easier. Band indica lights show at a glance whether you're tuned to FM or AM.

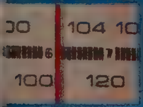
You can even play your stereo records through this radio—there are rear-pa jacks for plugging in any record changer equipped with a crystal cartrid Front-panel switch selects FM, stereo FM, AM and phono. Line-cord F antenna, built-in AM antenna, terminals for external FM antenna. 17 trans tors, 17 diodes, 4 thermistors. Cabinet has matching grille cloth covering spe ers. 8⅛x19⅞x5½″. For 105-125 volts, 60 Hz AC. From Japan.
10 A 5055 X. Shpg. wt., 14 lbs. 59



DELUXE DETAILS

Jacks for phono, aux., stereo headphone, tape


Clearly marked five-position selector switch



Easy-to-read illuminated slide-rule dial

Good-looking, solid die-cast front panel

6½" woofer and 2" tweeter in each speaker system

Our finest and most powerful Allied Stereo FM-AM Radio . . four speakers

99^{50} $5 monthly*

25-watt peak music power solid-state circuit . . Component-type speaker systems, each with 6" woofer and 2" tweeter, separate up to 14-ft. for real-as-life stereo . . Oiled walnut cabinets

Model 2690. This 3-piece ensemble offers everything you could want in a fine stereo FM-AM radio. Fully enclosed speaker systems spread up to 14 ft. apart for a "wall" of sound that can give you more stereo realism than consoles costing several times more. Solid-state circuit, with 20 transistors, 18 diodes and 4 thermistors, pours out 25 watts of peak music power. Radio pulls in static-free FM, stereo or monophonic, plus good-quality AM. Has illuminated slide-rule dial; stereo FM indicator light; pushbuttons for AFC and AC on-off; balance control; plus *separate* bass and treble controls. There are jacks for stereo headphones and a stereo record changer with crystal or ceramic cartridge. Outputs for tape recording. Built-in FM-AM antennas, terminals for external FM antenna. Switch selects AM, FM, stereo FM, phono or aux. Adhesive pads, included, permit speakers to be used vertically or horizontally. Radio has a solid die-cast panel with the look and feel of finest quality. Radio, 4⅜x16⅜x9⅞". Speaker enclosures, 13x8¼x7½". For 117 VAC. Japan.
10 A 4268 U. Shpg. wt., 34 lbs. 99.50

BSR 4-speed Mini-Changer

39^{95}

Mini-changer for above. With base, dust cover. Low-mass tubular arm, ceramic stereo cartridge, synthetic sapphire styli. Detachable spindle. Also includes 45-rpm spindle. 12x8½". England. 117 VAC. 9 lbs.
10 A 4713 X. 39.95

3-piece Stereo FM-AM Radio in vertical, wood cabinets

79^{95}

Solid-state stereo FM-AM radio in space-saving, vertical design with two acoustically balanced speakers. Lighted dial; blackout face. AFC on FM; tone and balance controls. Ceramic phono/tape input. Stereo headphone jack. 6-watt peak music power. Walnut-finish wood cabinet, 11½x6⅞x7"; Antennas. Speakers, 11½x7½x7". 117 VAC. Japan.
10 A 4390 U. Shpg. wt., 18 lbs. **79.95**

Stereo FM-AM 3-piece Radio . . budget priced

64^{95}

Full-dimensional stereo entertainment at a low price. Solid-state stereo FM-AM radio has extra-wide slide-rule dial; stereo FM light; volume, balance and tone controls. Phono input. 4-watt peak music power. Low-profile plastic cabinet in walnut finish, 3½x15x8$\frac{3}{16}$". Two 5" permanent-magnet speakers in matched enclosures, 7½x6x3¾". 117 VAC. Japan.
10 A 4392 X. Shpg. wt., 10 lbs. **64.95**

Stereo FM-AM Radio features FET front-end

89^{95}

FET front-end for superior stereo FM. Slide-type bass, treble, balance controls, stereo FM light. AFC, headphone jack. Lighted dial. Tape, phono inputs. Two 6⅜" speakers. 15-watt peak music power. Radio can be placed vertically—vertical dial plate included. Built-in antennas. Walnut cabinets. Radio, 3¾x10$\frac{5}{16}$x7"; speakers, 10$\frac{4}{16}$x7¼x7". 117 VAC. Japan.
10 A 4395 U. Shpg. wt., 21 lbs. **89.95**

A Stereo FM-AM Radio/8-track Tape Player

Deluxe solid-state stereo FM-AM radio with built-in 8-track stereo cartridge player delivers powerful hi-fi performance. Includes two 5" speakers in matching enclosures; can be placed for maximum stereo realism. Radio has slide-rule dial for easy tuning; AFC switch for drift-free FM; balance, bass and treble controls. Tape player plays 8-track pre-recorded cartridges with superb fidelity. Inputs for magnetic and ceramic phono. Front-panel stereo headphone jack. Peak music power: 16 watts. Walnut finish wood cabinets. Radio/player, 3⅛x16½x9⅛"; speakers, 10¼x7¼x5½". For record changer, we recommend 4-speed Mini-Changer on facing page. U.L. Listed. For 117 VAC. From Japan.
10 A 4393 U. Shpg. wt., 22 lbs. **134.95**
10 A 4394 U. Above, without tape player. 18 lbs. **89.95**

B Stereo FM-AM-SW Radio/8-track Tape Player

Our best 3-pc. stereo radio/8-track player offers a variety of listening sources—stereo and mono FM, AM, international shortwave from 4-12 MHz, 8-track stereo tape cartridges. Two matching speaker enclosures, each with 2 air-suspension speakers, provide brilliant wide-range stereo. Tape player has program indicator lights. Radio has slide-rule dial tuning, stereo indicator light. Separate bass and treble, balance, loudness switch, tuning meter. Peak music power, 25 watts. Input for ceramic record changer (below). Stereo headphone jack. Oiled walnut-finished wood. Radio/player, 4⅜x19¾x9⅞"; speakers, 12¼x9⅞x7½". Japan.
10 A 5132 U. Shpg. wt., 41 lbs. **179.95**

4-speed Changer. (Not illus.) Stereo cartridge, walnut base, cover. Storage space for 6 tape cartridges. 9⅝x19¾x6⅛".
10 A 4203 X. England. Shpg. wt., 11 lbs. **49.95**

C Stereo FM-AM Radio/8-track Tape Player

Enjoy the modern sound of stereo FM radio and stereo tape with this solid-state ensemble. Radio pulls in stations with excellent clarity. Illuminated slide-rule dial is extra-wide for easy tuning. Radio has balance and tone controls, function indicator lights, stereo FM indicator. AFC for drift-free FM. Tape player has channel selector. Matching enclosures with 5" speakers separate for authentic stereo. 8 watts peak music power. Input for ceramic phono. Stereo headphone jack. Built-in AM antenna, external FM antenna. Oiled walnut-finished wood cabinets. Radio/player, 4x15½x10"; speakers, 10x7½x6". For record changer we recommend 4-speed Mini-Changer on facing page. U.L. Listed. For 117 VAC. From Japan.
10 A 4388 U. Shpg. wt., 23 lbs. **124.95**
10 A 4389 U. Above, without tape player. 19 lbs. **79.95**

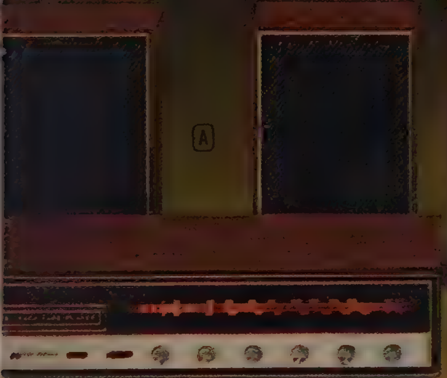
D Stereo FM-AM Radio with FET front-end

Solid-state stereo radio has sensitive FET FM front-end and silicon-transistor amplifier for splendid stereo entertainment. Handsome control panel has illuminated slide-rule dial; stereo indicator light; balance, bass and treble controls, six-position function selector switch for FM, AM, Phono, Tape, Aux. AFC locks in FM stations, prevents drift. Peak music power, 20 watts. Enclosures with 6½" speakers separate to provide realistic stereo. Input for phono. Outputs: tape recorder, tape deck, stereo headphone jack. Walnut-finish wood cabinets. Radio, 4¼x16⅝x9⅞"; speakers, 11⅞x8⅜x5¾". Optional four-speed Mini-Changer record changer shown on facing page. U.L. Listed. For 117 VAC. From Japan.
10 A 5168 U. Shpg. wt., 18 lbs. **109.95**

E Panasonic automatic-tuning Stereo Radio

This FM-AM radio has automatic touch-bar 2-way tuning for easiest possible station selection. FM circuit has FET's and tuned RF stage for high sensitivity. Modern vertical slide-type volume, balance, bass and treble controls allow exact adjustments. Tuning dial is illuminated when radio is on, "blacks out" when radio is off. DX/local switch for best reception of distant or local stations. Peak music power, 18 watts. Inputs: phono, tape. Outputs: tape, stereo headphone jack. Built-in AM, line cord FM antenna. Handsome walnut finish wood cabinets. Matching enclosures each have 6½" and 2½" speakers. Radio, 4⅝x17½x11$\frac{5}{16}$"; speakers, 11⅜x8$\frac{11}{16}$x6⅝". Optional four-speed Mini-Changer phono listed on facing page. 117 VAC. Japan.
10 A 4387 U. Shpg. wt., 23 lbs. **149.95**

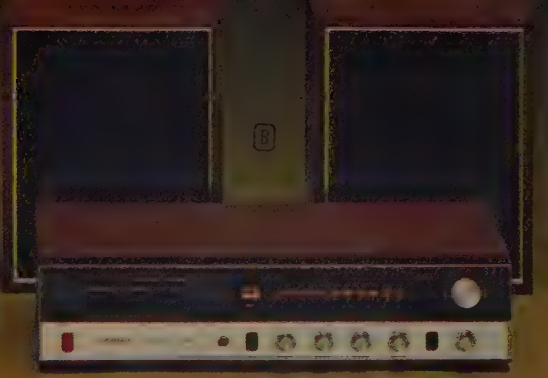
All models have ceramic-cartridge phono input, Fig. A also takes magnetic cartridge



Stereo FM-AM Radio/ 8-track Tape Player

134^{95}

$7 monthly*



Stereo FM-AM-SW Radio/ 8-track Tape Player

179^{95}

$9 monthly*

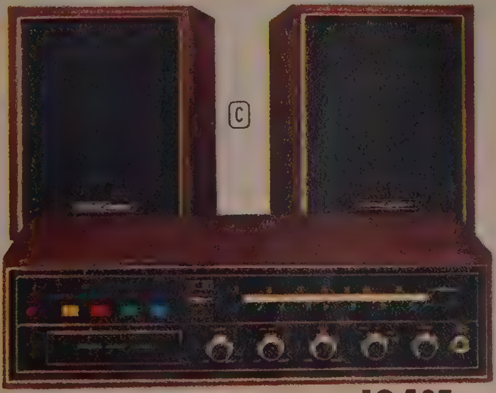
BSR four-speed stereo Mini-Changer with cartridge, base and dust-cover

Recommended for use with radios on these 2 pages

39^{95}

$5 monthly*

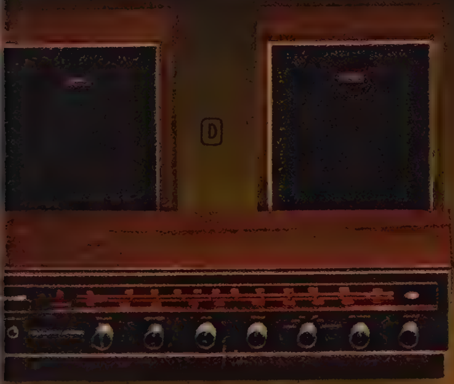
erfect automatic record changer for ensembles on nese two pages. Plays stack of up to 6 records. Ceramic artridge, synthetic-sapphire styli, and 45-rpm spindle. 2x8½". For 115 VAC.
0 A 4713 X. England. Shpg. wt., 9 lbs. 39.95



Stereo FM-AM Radio/ 8-track Tape Player

124^{95}

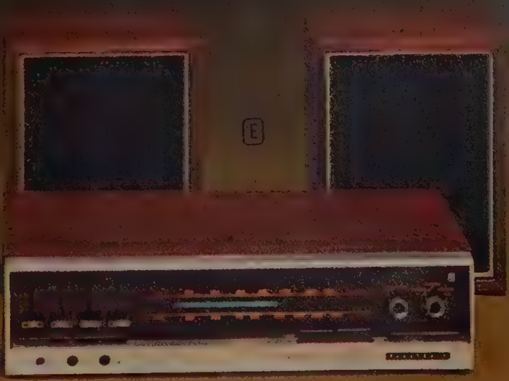
$7 monthly*



Stereo FM-AM Radio with FET front-end

109^{95}

$6 monthly*



Stereo FM-AM Radio with automatic tuning

149^{95}

$8 monthly*

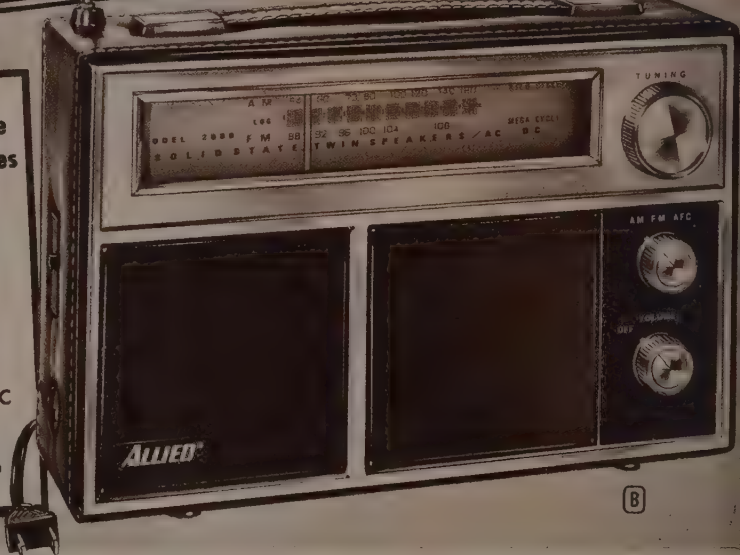
Popular Allied® battery/AC Portables

FM
AM
SW
SW
ALLIED 2684
A

Four-band Portable features two shortwave bands and two speakers

39^{95} $5 monthly
see page 438

- Tunes standard FM and AM plus 4 to 24 MHz
- Plays on batteries or AC
- Tone control for fine sound
- Padded-vinyl covered case
- Fine-tuning helps separate stations on SW bands



Full-size FM-AM Portable has most wanted features at a budget price

29^{95} $5 monthly
see page 438

- Padded leatherette case with black metal grille
- Slide-rule tuning dial
- Uses batteries or 117 VAC with self-storing cord
- AFC locks-in FM stations
- Two speakers, tone switch

Ⓐ Value-priced Portable tunes the world

Model 2684. This solid-state portable brings you great listening on standard FM and AM, plus fascinating world-wide shortwave on two bands. Tunes 4-12 MHz and 12-24 MHz for foreign countries, Hams and more. Fine-tuning control helps separate stations on crowded SW bands. Slide-rule dial has momentary dial light, when used on battery. Switchable AFC prevents FM drift. Tone control, two 4" speakers. Twin telescoping antennas. Uses 4 "D" batteries or 117 VAC. 13 transistors. 10⅞x7½x4". With batteries, earphone.

10 A 4284 X. Japan. Shpg. wt., 6 lbs. 39.95

18 A 5079. Extra "D" Batteries. 12 oz. . . . . **Pkg. of 4/65¢**

"ABC's of Shortwave Listening". (Sams). Tips on shortwave listening, SW frequencies and shortwave station information. 96 pages. Great for beginning SWL's.

23 A 7538. Shpg. wt., ¾ lb. 2.50

Ⓑ Full-feature FM-AM Portable Radio

Model 2680. This large solid-state FM-AM portable radio boasts two speakers for rich, full sound. Take it along anywhere to enjoy your favorite local programs . . plays on 4 "C" batteries or 117 VAC with self-storing cord. Extra-wide slide-rule dial is clearly marked for easier station selection. Switchable AFC locks-in FM stations to prevent drift, switches off to let you tune in weaker or more distant stations. Hi-low tone switch.

Eleven transistor, 3-diode circuit provides good reception. Built-in ferrite AM, 29½" telescoping swivel FM antenna. Durable, attractively designed padded leatherette-covered case with black metal grille. Strong spring-loaded carrying handle. Size, 7x10⅞x3½". With batteries, earphone. From Japan.

10 A 4113 X. Shpg. wt., 4 lbs. 29.95

18 A 5078. Extra "C" Batteries. 6 oz. . . . . **Pkg. of 2/33¢**

Personal Portables

-VHF police/public service band* Radio

ractively-styled solid-state portable tunes AM 148-174 MHz VHF for local police, fire, emer-cy and business radio communications. 162.55 Iz weather bureau station may be heard in many ts of the country. Plays anywhere on 4 "C" bat-es or 117 VAC with self-storing cord. 3½" aker. AFC prevents drift. Telescoping antenna. x9x3". With batteries, earphone. Japan.
A 4031 S. Shpg. wt., 4 lbs....................29.95

AM Portable. As above, except FM and AM, no F. 3½" speaker. Slide-rule dial. AFC. Leather-e case. 6¼x9x3". Batteries, earphone. Japan.
A 4292 S. Shpg. wt., 4 lbs....................29.95

ompact AM-VHF police/PSB* Portable

ten in on local police, fire, emergency and iness radio and government weather station adcasts in many areas. Covers 148-174 MHz IF and regular AM. Uses 4 "AA" batteries or VAC with optional adapter (below). Slide-rule l with vernier tuning. AGC for steady reception. x3½" speaker. Ferrite AM, telescoping VHF ennas. 4½x7½x2¼". With batteries, earphone.
A 4560 S. Japan. Shpg. wt., 2 lbs...........19.95
A 4561 S. 117 VAC Adapter. Wt., 6 oz........2.95

FM-AM battery/AC Portable

eat value in a portable radio. Get good, static-free al FM reception and clear AM through a 2¾" amic speaker. Plays anywhere on 4 "C" batteries 117 VAC with self-storing cord. AFC. Solid-te. Built-in ferrite AM, and telescoping FM ennas. Leatherette case. 4¾x8¼x2¼". With teries and earphone. Imported.
A 4025 S. Shpg. wt., 3½ lbs...............16.95

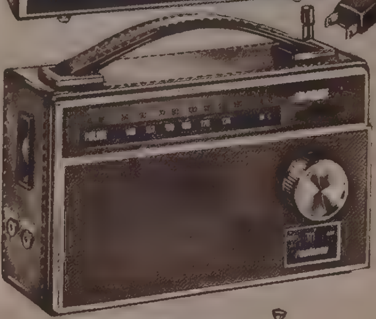
g-range AM Portable. (Not illus.) Tuned RF stage. cellent for vacations and remote areas. Vernier ing. Simulated leather case. 4x7x2¼". With teries, AC cord, earphone. Japan.
A 4286 S. Shpg. wt., 3½ lbs...............16.95

Batteries or 117 VAC

29^{95}

$5 monthly

see page 438

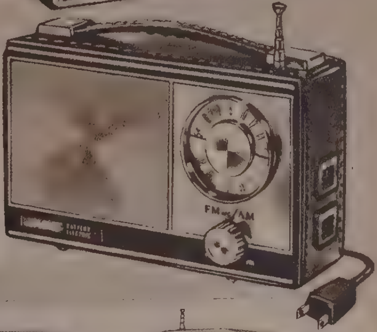


Tunes AM and Police*

19^{95}

$5 monthly

see page 438



Budget-price 2-band radio

16^{95}

Cut

2.00

ocket

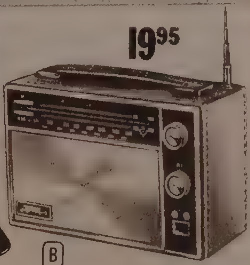
-VHF*

rtable

3^{95}

VISCOUNT 12

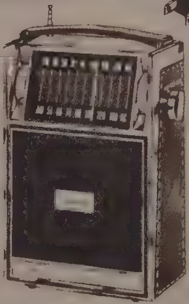
A



19^{95}

B

C **19^{95}**



Ⓐ Lowest priced AM-VHF*

as $15.95 in Our Catalog 285. unes AM and 149-173 MHz VHF lice/public service band for police, e, emergency, public utilities and siness band radio. Hear up-to-the-inute weather reports in many areas 162.55 MHz. Slide-rule dial for pre-se tuning. Silicon transistors. Built-AM, telescoping FM antennas. 5x 1¾". With 9-volt battery and car-ing strap. Imported.
A 4769 S. Wt., 1½ lbs..........13.95

-AM Portable Radio. (Not illus.) ives good local FM-AM coverage. 5x 1¾". Batt., earphone. Imported.
A 4225 S. Wt., 1 lb...........11.88

Ⓑ Battery/AC FM-AM Portable

Compact FM-AM portable goes along anywhere .. operates on 4 "AA" batteries or 117 VAC with self-storing cord. Has vernier slide-rule tuning for pinpoint selectivity. Leatherette case. 4⅝x7½x2¼". Batteries, earphone. Imported.
10 A 4246 S. Shpg. wt., 3½ lbs......19.95

Ⓒ Panasonic FM-AM Portable

Handsome miniature radio has high-performance circuit for sensitivity and tone unusual for a radio this size. 2¼" speaker. Ferrite AM, telescoping FM antennas. 4½x3¼x1½". With 9-V battery, earphone, wrist strap. Japan.
10 A 4026 S. Shpg. wt., 1½ lbs.....19.95

24^{95}

Battery/AC FM-AM Radio

Rugged portable has powerful solid-state circuit with RF stage on FM. Compact size, just right for beach or kitchen. AFC prevents drift. Plays on batteries or AC. 3" speaker. Slide-rule dial, thumbwheel controls. Ferrite AM, telescoping swivel FM antennas. Vinyl-covered case. 8x5¼x3". 4 "AA" batteries, earphone. Japan.
10 A 4219 S. Wt., 6 lbs....24.95

HF NOTE: *Public Service Bands cover police, fire, emergency services, utilities, etc. The closer you are to a city, highway or airport, the more VHF you will hear. Calls are short and intermittent. 162.55 MHz weather station is heard in many urban areas.

FM-AM Clock-Radios

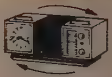
Models on these two pages have 60-minute Sleep Switch and wake you to music or buzzer. All have solid-sta circuits, full-view dials, precision clocks. For 117 VA

54^{95} A

B 46^{95}

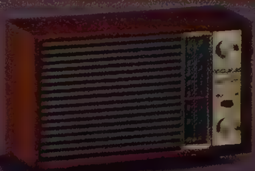
C 59^{95}

Swivels 30° on base for extra convenience



E 34^{95}

D 44^{95}



G 29^{95}

F 39^{95}

J 24^{95}

L 19^{95}

H 34^{95}

K 27^{95}

Latest styling plus digital-readout clock

ling as modern as tomorrow. Walnut-grain cabinet, oked glass dial, chrome trim. Precision digital-read- ; clock dial is softly illuminated. AFC plus AGC for ft-free, stable FM. Good AM reception, too. 3⅛" aker, plus earphone for private listening. Lighted le-rule tuning dial. FM-AM band indicator. Built-in ennas. U. L. Listed. 3¾x11¾x5". Japan.
A 4001 X. Shpg. wt., 3¾ lbs..................54.95

B Sleek styling with digital clock system

citing "new look" styling. FM circuit has RF stage maximum station-pulling power. Has lighted slide- e dial, automatic volume control, tone control. AFC ks in FM stations. 3" speaker. Easy-to-read odom- r-type digital clock shows hours, minutes, seconds. alnut wood-grain plastic cabinet, leather-grain trim. I-AM antennas. 4¼x11½x5½". Japan.
A 4015 X. Shpg. wt., 5½ lbs..................46.95

C Our finest FM-AM Clock-Radio

nasonic. Full-size, wood FM-AM clock radio has ¾- tt output, big 4" speaker for excellent tone quality. ghted vertical slide-rule dial has individual band hts, push-bar band selector. AFC provides drift-free I. Lighted clock face. Matching push-bar for doze rm. On 30° swivel base. Deluxe walnut-finish wood binet. 6x13⅜x7⅛". Japan.
A 4139 X. Shpg. wt., 9 lbs..................59.95

D Dual-speaker model with walnut finish

wo-speaker FM-AM clock-radio in elegantly-styled lnut-finish wood cabinet. Features two speakers, 4" d 2". RF stage on FM for maximum station-pulling wer. AFC switch locks in FM stations. Slide-rule log le dial offers accurate tuning. Separate volume and e controls. Telechron clock-system has sweep-second nd. "Snooze" touch-bar for an extra 10-minute nap. x13¾x5⅛". Japan.
A 4016 X. Shpg. wt., 8 lbs..................44.95

FM-AM Radio. Above, less clock. Shpg. wt., 7½ lbs.
10 A 4017 X..................34.95

F FM-AM Clock-Radio in wood cabinet

nart FM-AM clock-radio in luxurious walnut-veneer od cabinet. Features large 4" dynamic speaker for h, full-tone sound. Vertical slide-rule dial for precise ning. AFC switch on FM. Telechron clock-system has nooze" button, lighted dial, sweep-second hand. 14¼x5⅛". Japan.
A 4061 X. Shpg. wt., 5¼ lbs..................39.95

FM-AM Radio. Above, less clock.
10 A 4062 X. Shpg. wt., 4 lbs..................29.95

H Low-profile model with two speakers

ompact low-profile FM-AM clock-radio has two- eaker system with 3" and 2½" speakers for wider nal range. Convenient slide-rule dial offers precision ning. AFC provides drift-free FM. Separate tone ntrol. Full-feature clock-system has "snooze" button, minous dial, sweep-second hand. Handsome wood- ain plastic cabinet. 4½x11x7¾". Japan.
A 4185 X. Shpg. wt., 5 lbs..................34.95

AM Clock-Radio. Above, but no FM or tone control.
10 A 4188 X. Shpg. wt., 4 lbs..................24.95

K Budget-priced low-profile model

yled extra-low and compact for bedside table, book- elf or desk. Features large 3½" dynamic speaker for ch, mellow tone. Lighted easy-to-read slide-rule dial. rift-free FM. Telechron clock has "snooze" bar, lumi- ous hands and dial. Walnut-grained plastic cabinet. arphone. 3⅛x9½x5⅛". Japan.
A 4195 S. Shpg. wt., 4 lbs..................27.95

FM-AM Radio. As above, less clock.
10 A 4197 S. Shpg. wt., 3½ lbs..................19.95

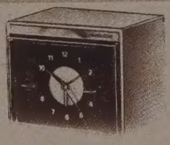
29^{95} N
$5 monthly*

M 39^{95}
$5 monthly*

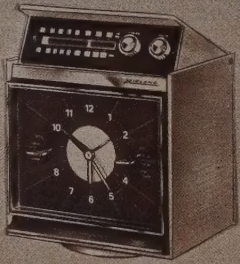
M Large twin speakers for extra tonal range

Outstanding FM-AM clock-radio provides that desired extra tonal range with two 3½" wide-range speakers. Convenient slide-rule log scale tuning dial. Switchable AFC for drift-free FM. Tone control. Precision Telechron clock has ten-minute "snooze" bar. Handsome walnut-grain finish plastic cabinet. 6¾x11¾x3¾". Japan.
10 A 4078 X. Shpg. wt., 4½ lbs..................39.95

N **10 A 4079 X. FM-AM Radio.** Less clock. 3¾ lbs.....29.95



Radio drops out of sight under control-panel lid



29^{95} $5 monthly*

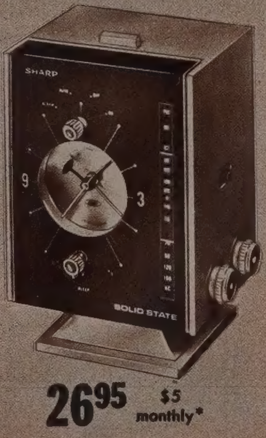
Unique "Hideaway" model on swivel base

Clever design permits radio controls to slant upward toward eye level or disappear completely under specially designed lid. Clock appears to stand alone in modern, polystyrene cabinet. FM-AM radio plays in open or closed position. Has slide-rule dial, volume control. AFC provides drift-free FM. Has 2½" side-mounted speaker. Large-dial, precision clock-system with luminous hands and "snooze" bar. Mounted on 360° swivel base. Size, 6½x6¼x5". Japan.
10 A 4065 S. Shpg. wt., 3½ lbs..................29.95

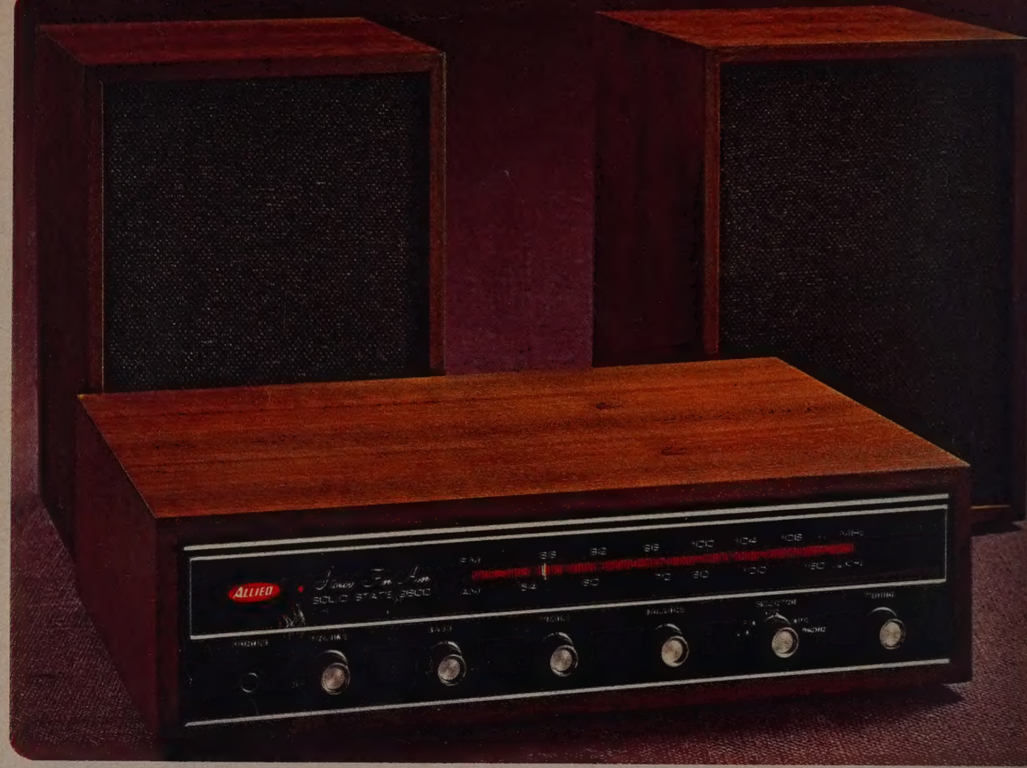
Styled to save space on night table or shelf

Cube-shaped clock-radio offers ultramodern styling and good FM-AM reception. Deluxe features include large, modern clock face and vertical slide-rule tuning dial.

Built-in AFC for drift-free FM. Has 2⅝" dynamic speaker. Earphone for private listening. Precision Telechron clock-system has "snooze" button, luminous clock hands, sweep-second hand. High-impact polystyrene cabinet. Size, 7x4⅝x3¾". From Japan. Shpg. wt., 4 lbs.
10 A 4192 S...........26.95



26^{95} $5 monthly*



Allied® Stereo FM-AM Radio..our lowes price for any 3-piece model with woo cabinets and component-type features

BASS
TREBLE

Separate bass and treble controls

Built-in stereo headphone jack

Oiled walnut finish all-wood cabinets

74⁹⁵

Never before so many extras at this bargain price . . 8-watt solid-state radio, two 5" speaker systems, stereo headphone and phono jacks, plus oiled walnut wood cabinets

Model 2600. First time we've ever offered a 3-piece stereo FM-AM radio with s many component-type controls and features at such a low price. Compact oile walnut-finish wood cabinets fit almost anywhere, look smart in any room. Idea for bookshelf or mantle. Solid-state radio pulls in static-free stereo FM, plu AM, and delivers 8 solid watts of peak music power. Matching 5" speake systems separate up to 14 feet for stereo channel separation at its best. Control include separate bass and treble, *plus* a balance control and function selector fo AM, FM, FM-AFC, Stereo FM and Phono. Has jacks for plugging in any stere record changer with ceramic cartridge, and stereo headphones. Stereo FM indicator light. Illuminated slide-rule dial. AFC locks in FM stations. Built-i FM-AM antennas, terminals for external FM antenna. AC convenience outlet Metal-look panel with chrome trim. 19 transistors, 17 diodes, 4 thermistors Radio, 3¾x14¾x10⅝". Speaker enclosures, 10x7x7⅞". For 117 VAC. Japan.
10 A 5057 U. Shpg. wt., 23 lbs. *74.9*

39⁹⁵

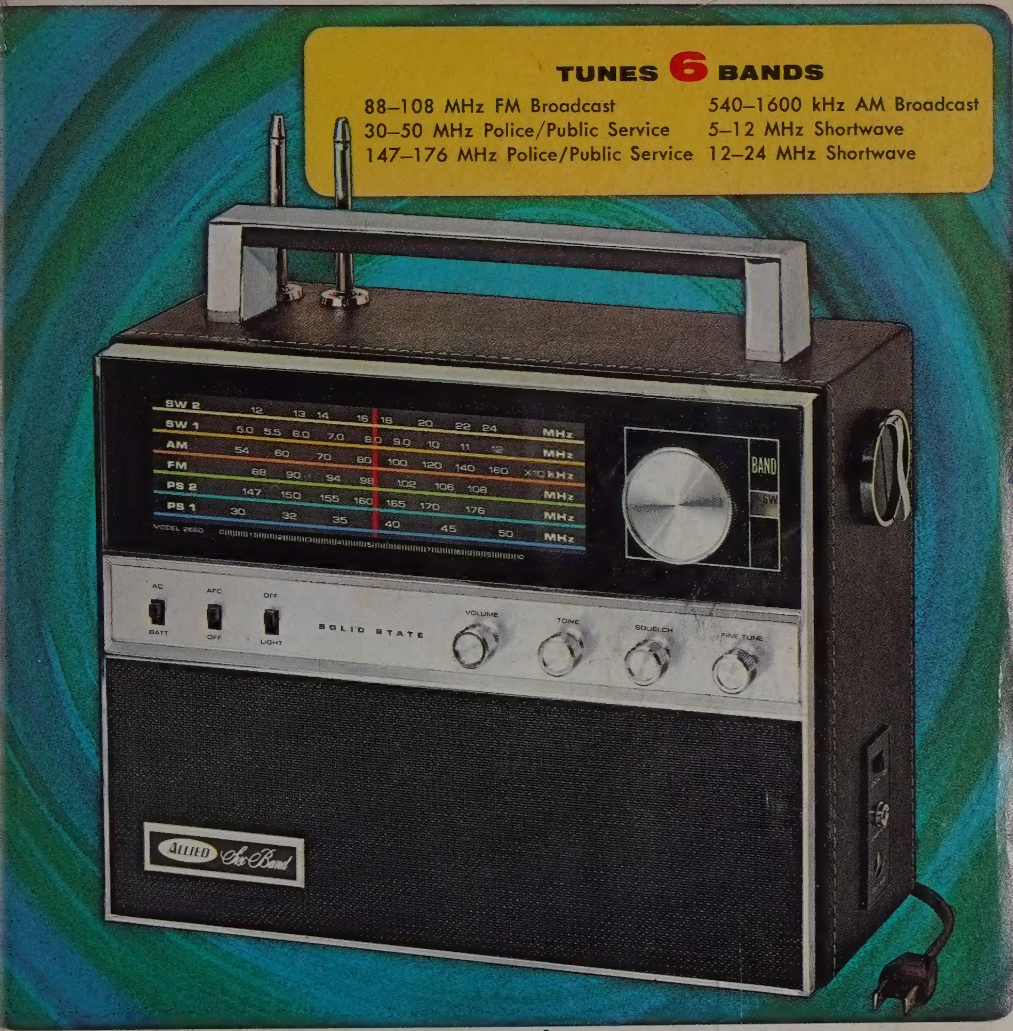
Garrard Demi-Changer

Four-speed. Diamond needle, ceramic stereo cartridge, 2 spindles for automatic or manual operation. Base, dust cover. 12x8½". 117 VAC. England.
13 A 3109 X. 10 lbs. . . . 39.95

BSR 4-Speed Changer

39⁹⁵

Synthetic-sapphire needle, ceramic stereo cartridge. Automatic shutoff. Base, cover, 45-rpm automatic spindle. 12x8½". 117 VAC. U.L. Listed. England.
10 A 4713 X. 9 lbs. 39.95



TUNES 6 BANDS

88–108 MHz FM Broadcast	540–1600 kHz AM Broadcast
30–50 MHz Police/Public Service	5–12 MHz Shortwave
147–176 MHz Police/Public Service	12–24 MHz Shortwave

Allied® 6-band battery/AC Portable Radio

Our latest solid-state portable gives you wide coverage of international shortwave, police, fire, emergency and business VHF, plus FM and AM . . Plays anywhere on batteries or AC

Model 2660. Allied's own 6-band solid-state radio offers exceptional versatility at an unbeatable price. Now you can listen to six of the most popular radio bands everywhere you go—rugged portable operates on batteries or 117 VAC with self-storing cord. For everyday listening, tune in your favorite FM and AM stations. Also get news and entertainment and listen in on Hams from all over the world on two shortwave bands. Or keep posted on what's happening locally on two VHF police/public service bands.

Big slide-rule dial makes tuning easy; has momentary-action dial light switch. Fine-tuning control helps separate stations on shortwave. Squelch control silences speaker between calls when monitoring VHF. Switchable AFC prevents FM drift. Local/Distance switch. Tone control. 3x6" speaker.

Built-in ferrite AM, dual telescoping 27" FM-SW-VHF antennas; plus jack for external SW antenna. (See page 536 for antenna accessories.) Handsomely-styled leatherette-covered case with chrome trim. 12x16x6". 15 transistors, 8 diodes, 2 rectifiers. With 4 "D" batteries and earphone. From Japan.

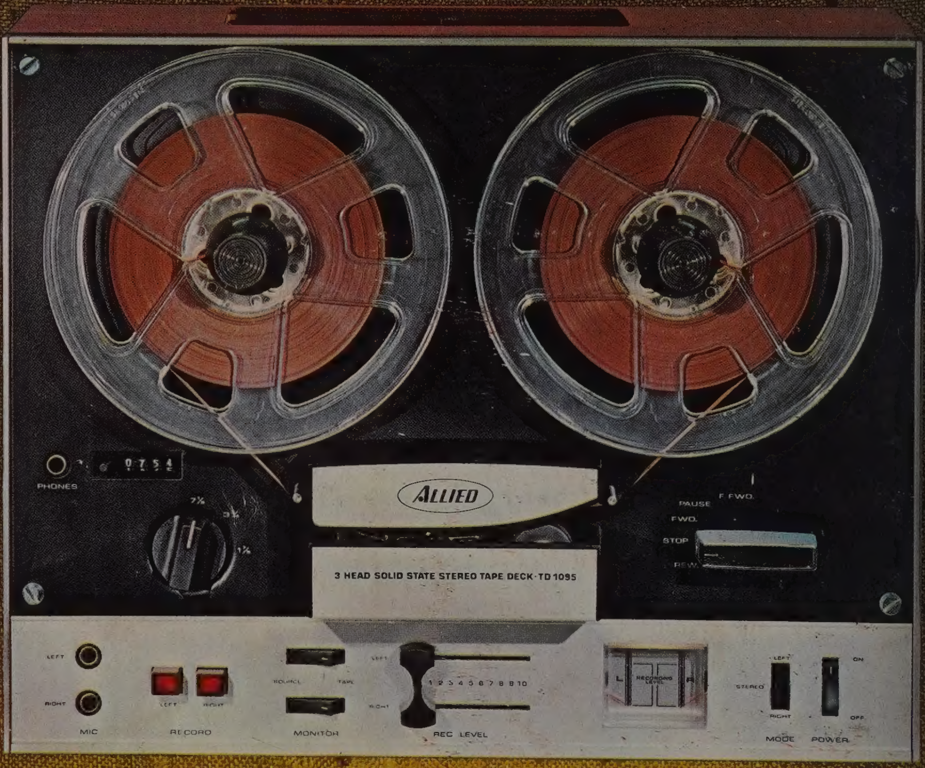
10 A 5056 X. Shpg. wt., 12 lbs. 69.95

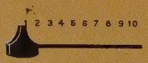
Features two VHF police/public service bands

69^{95} NO MONEY DOWN *See page 438*

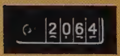
With batteries and earphone

VHF NOTE Police/Public Service Bands cover police, fire, emergency services, etc. The closer you are to a city, highway or airport, the more calls you will hear. Calls are brief and intermittent. Continuous weathercasts heard on 162.5 MHz in many urban areas.

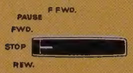

PHONES
ALLIED
7½
3¾
1⅞
3 HEAD SOLID STATE STEREO TAPE DECK · TD 1095
PAUSE
F FWD.
FWD.
STOP
REW.
LEFT
RIGHT
MIC
RECORD
SOURCE
TAPE
MONITOR
1 2 3 4 5 6 7 8 9 10
REC LEVEL
L
RECORDING LEVEL
R
STEREO
MODE
ON
OFF
POWER


2 3 4 5 6 7 8 9 10

Sliding record level controls for easier operation



Four-digit counter for editing and locating selections easily


PAUSE
F FWD.
FWD.
STOP
REW.

Convenient positive-acting single-knob function control

179^{95}

$9 monthly

see page 438

Allied Stereo Tape Deck features 3 heads plus all silicon transistors

Model TD-1095. Allied's latest stereo tape deck offers features to please the most critical recording enthusiast at a moderate price. Records 4-track stereo or mono; plays through your stereo music system or console. Boasts 3 heads for tape monitoring, sound-on-sound, sound-with-sound, other special effects. Automatic tape lifter protects heads. Flutter-free motor for accurate 7½, 3¾, 1⅞ ips speeds. Automatic shutoff. Single-knob function control with instant pause. Push-to-reset 4-digit counter. Slide-type recording level controls; illuminated level meters. Inputs: 2 mike, 2 aux. Outputs: line, stereo headphone. Response: ±3 dB, 30-22,000 Hz. Flutter/Wow: below 0.1%. 12¾x16x6⅝". 117 VAC. Japan. *Full specs on page 120.*
15 A 7574 U. Shpg. wt., 25 lbs. **179.95**

Stereo Tape Deck with Mike Bonus. TD-1095 tape deck with Allied 3311P mike outfit for only $5 more. Pair of dynamic mikes, desk stands in custom-fitted case. 13½x11¾x2½". Japan.
15 A 0182 L2U. Shpg. wt., 31 lbs. **184.95**

only $5 more

Pair of Allied Mikes in custom-fitted case

Save $44.95

Reg. $49.95